

Yeates, Lindsay B.,
James Braid (VI): Exhuming the Authentic Braid — Priority,
Prestige, Status, and Significance,
Australian Journal of Clinical Hypnotherapy & Hypnosis,
Volume 40, No.2, (Spring 2018), pp.168-218.

NOTE to the Reader

- (1) This is the sixth of six interconnected articles — the first two were published in the Journal's "Autumn 2018" issue (which, due to unavoidable delays, was not released until February 2019).
- (2) Due to the complexities of the source material involved, and the consequences of a number of unavoidable delays, the (originally proposed) set of four articles were subsequently expanded to six — the remaining four articles (including this one) were published in the "Spring 2018" issue of the Journal (which, again, due to unavoidable delays, was not released until late March 2020).
- (3) The entire set of six articles are part of a composite whole (i.e., rather than an associated set of six otherwise independent items).
- (4) From this, the reader is strongly advised to read each of the six articles in the sequence they have been presented.
The articles were specifically written on the embedded assumption that each reader would dutifully do so (with the consequence that certain matters, theories, practices, and concepts are developed sequentially as the narrative proceeds).
- (5) The original paper's content remains unchanged. For the reader's convenience, the original paper's pagination is indicated as **[168]**, etc.



Australian Society of Clinical
Hypnotherapists
Change. Grow. Succeed.

This publication has been
adopted as the official
journal of the Australian
Society of Clinical
Hypnotherapists
www.asch.com.au

The Australian Journal of
**Clinical
Hypnotherapy
& Hypnosis**

An interdisciplinary journal dedicated to advancing
the art, science, and practice of hypnosis

Contents

1 Editorial

3 James Braid (III): Braid's Boundary-Work, M'Neile's Personal Attack, and Braid's Defence

Lindsay B Yeates

58 James Braid (IV): Braid's Further Boundary-Work, and the Publication of *Neurypnology*

Lindsay B Yeates

112 James Braid (V): Chemical and Hypnotic Anaesthesia, Psycho-Physiology, and Braid's Final Theories

Lindsay B Yeates

168 James Braid (VI): Exhuming the Authentic Braid—Priority, Prestige, Status, and Significance

Lindsay B Yeates

219 About the Contributor

220 Publication Standards

223 Subscription Information

[1]

Editorial

In my Volume 40 #1 editorial of *The Australian Journal of Clinical Hypnotherapy & Hypnosis*, which along with this issue marks the 40th anniversary of its publication, I mentioned I had two takeaways from Lindsay Yeates' research on James Braid. This time, with the addition of the final four articles to the suite, I draw your attention to another two.

I'll start with a personal story from my university days in Canberra, ACT, when I befriended a wonderful young woman who also happened to be a devout Christian. Although we had different belief systems we got along incredibly well. After I completed my Arts Degree, I gravitated towards studying Clinical Hypnotherapy in Sydney, NSW, and subsequently took on four years of study before opening up a therapy practice. When I mentioned this undertaking to my friend, she suddenly grew serious and began warning me about the perils of hypnosis and hypnotherapy, mentioning they were tools of the devil. I was completely taken aback by her perspective, especially since she had modern values, and I gently pointed out that I could not fathom how hypnotherapy could be a force of evil when its underpinnings were focused on doing good in the community, namely helping people heal their themselves from within. I soon learned she knew nothing about hypnosis and when I asked her where she had come across such a notion of devilry in the rank and file of therapists around the globe, she mumbled something about this philosophy being a teaching of her church. I soon learned she had accepted this dogma without questioning it or indeed educating herself, as I'm sure many others have done. We never spoke of it again and remained friends for a few more years until we drifted apart, but for over 25 years I wondered where this false belief had emanated from and from whom. I finally received my answer when I read Lindsay Yeates' article, which delves into the Reverend M'Neile's personal attack from the pulpit in 1842 on James Braid and hypnotism whereupon the superstitious M'Neile had declared without any corroborating evidence that "all mesmeric phenomena were due to 'satanic agency'". Although James Braid responded to this the diatribe from the podium and in print, M'Neile's toxic seeds were sown—his sermon was published and distributed to tens of

[2]

thousands of people in the UK and around the world for many years and where even to this day, 150+ years later, they are still inflicting damage on a noble and positive-outcome oriented humanistic therapeutic modality by being repeated (dare I say!) by thousands of supposed “modern” thinkers, living in a “modern” time but still hampered by out-dated views and a lack of critical thinking.

I can't help but think how exhausting it must have been for James Braid to have kept defending himself and his breakthrough scientific work during his lifetime. Again, I state that Lindsay Yeates' masterwork hopefully will redress the unjust, unfair, and ignorant views about Braid that have been perpetuated through the ages.

There is a lot more I could write about my deconstruction of and relationship to Yeates' masterwork but I will leave you with my final takeaway and that is about the profession of hypnotherapy itself, which has on occasion been politicised over the years by various stakeholders who wish to claim dominion over the practise of it. As Lindsay Yeates so eloquently explains, “despite the fact that hypnotic practices are still to be satisfactorily explained (or theoretically justified) today”, there is a science and an art to clinical hypnotherapy practise that is not the unique property of one particular professional group or another.

As a parting comment I wish to state that it has been a long and arduous journey for Lindsay Yeates to complete his six articles on James Braid. He pursued and uncovered thousands of obscure references, chasing up every lead like a private detective to give us an accurate picture as he could of Braid and his contribution to the field of hypnotism. Lindsay's attention to detail is extraordinary. These articles reflect his passion for his subject and his need to right a wrong and return Braid to his rightful place in hypnotherapy history. It was an honour to work with Lindsay and to lose myself in Braid's world, Lindsay's extraordinary scholarship and his beautiful command of the English language. I believe these articles need to be compulsory reading for any lay or established hypnotherapist to understand the roots of our present-day practise.

This issue of the journal marks the end of my five year term as journal editor, and I am most proud and grateful to the contributors who have brought their unique knowledge to the journal's pages. I thank the ASCH Board for their trust in appointing me to this position, and I now pass you over to the capable new editor Ann Moir-Bussy to cement her own voice and style in these pages and to bring you more wonderful articles from Australian and international hypnotherapy experts. Farewell.

Julie Ditrich

Journal Editor
journaleditor@asch.com.au

[168]

James Braid (VI): Exhuming the Authentic Braid — Priority, Prestige, Status, and Significance

Lindsay B Yeates, PhD

School of Humanities and Languages, University of New South Wales, Sydney, NSW, Australia

Abstract

The ‘boundary-work’ activities of James Braid (1795-1860), natural philosopher, gentleman scientist, structured thinker, and well-respected Manchester surgeon were unexpectedly reactivated in late 1859 by the sudden Continental interest in the use of his techniques for inducing hypnotic anaesthesia. This article examines Braid’s immediate response to that interest and, also, provides details of the matters Braid addressed in his last three letters, written just weeks before his death. In addition to his considerable contributions to surgery and medicine, a strong case is made for the unparalleled watershed importance of Braid and his discoveries, his theoretical understandings, his therapeutic innovations, and his relentless ‘boundary-work’ in relation to the establishment of *hypnotism* as an appropriate, entirely autonomous domain of philosophical and medico-scientific inquiry; and, in doing so, an appraisal is made of Braid’s true significance, his clear priority, his continued disciplinary relevance, and his undoubted pre-eminence in the domain of ‘*psycho-physiology*’.

KEY WORDS: James Braid (1795-1860); boundary-work; hypnotism; hypnosis; hypnotherapy; hypnotic anaesthesia; dominant ideas; monoideism; psycho-physiology; hypnotic suggestion

1. Introduction

Having described Braid’s early life and professional development in Part I (Yeates, 2018a), his encounter with Lafontaine and its immediate aftermath in Part II (Yeates, 2018b), his tenacious ‘boundary-work’ in promoting hypnotism, and his defence against unwarranted attacks by M’Neile and the medical section of the *British Association for the Advancement of Science* (BAAS) in Part III (Yeates, 2018c), the nature, form, and content of his major work, *Neurypnology* (1843) in Part IV [169] (Yeates, 2018d), and having exhumed and examined his (long hidden) work with hypnotic and inhalation ether anaesthesia, and his (routinely ignored) 10-years’-post-*Neurypnology* theoretical position, and his revised, far more appropriate set of technical terms in Part V (Yeates, 2018e), we now move to the final stage: an account of the last years of Braid’s life — and, then, having fully restored Braid to his prestigious and well-deserved place in disciplinary

consciousness, conclude with an appraisal of his true significance, priority, and undoubted pre-eminence.

The first who investigated the matter [of mesmerism] in a scientific way, and who deserves more honour than he has yet received, was [a Scot], James Braid, a Manchester surgeon.

At first a sceptic, holding that the whole of the so-called magnetic phenomena were the results of illusion, delusion, or excited imagination, he found in 1841 that one, at least, of the characteristic symptoms could not be accounted for in this manner: viz., the fact that many of the mesmerised individuals are quite unable to open their eyes.

Braid was much puzzled by this discovery, until he found that the [mesmerists'] 'magnetic trance' could be induced, with many of its marvellous symptoms of catalepsy, aphasia, exaltation and depression of the sensory functions, by merely concentrating the patient's attention on one object or one idea, and preventing all interruption or distraction whatever.

But in the state thus produced, none of the so-called higher phenomena of the mesmerists, such as the reading of sealed and hidden letters, the contents of which were unknown to the mesmerised person, could ever be brought about.

To the well defined assemblage of symptoms which Braid observed in patients who had steadily gazed for eight or twelve minutes with attention concentrated upon a small bright object, and which were different from those of the so-called magnetic trance, Braid gave the name of *Hypnotism* ...

Fig.1. W T Preyer,
at the British Medical Association's 1880 Annual Meeting (Tuke, 1880, p.472).

2. After York and Glasgow

With both his York (Braid, 1855a) and Glasgow (BAAS.1; Braid, 1855b) articles published – and, thereby, having broadcast his final theoretical position, representational structure, and his expanded and more appropriate terminology – Braid turned his attention to the demands of his medical practice. From time to time, however, Braid continued to contribute his opinions, as an apothecary, chemist, and scientist, on matters that took his interest.

[170]

I think great praise is due to M. Azam and M. Broca for the zeal and success with which they have demonstrated my views on hypnotism.

Their marked success proves that they had not only carefully studied my views theoretically, but also that they were naturally gifted with much experimental tact, and a proper sense of the necessity of complying strictly with my recorded formulæ in all their details, otherwise they would not have been able so promptly to prove, as they have done, that most of my assertions were correct. ...

[Moreover,] I feel assured that, if my recorded results of certain modes of experimenting are strictly followed out by those who have acquired the requisite dexterity of manipulating, they may readily prove most of my assertions to have been rigorously exact, as M. Azam did.

Some of the phenomena, however require very nice management to demonstrate them satisfactorily to those who have not previously been familiar with such inquiries, as different phenomena are developed at **different stages**, and one merges so into the other, that those who do not clearly comprehend this are very liable to think they discover discrepancies which arise entirely from their imperfect

Fig.2a. Braid's response to the news from Paris (Braid, 1860d, p.312).

2.1 Forensic Test Error

In 1856, he raised a forensic issue related to evidence presented in the trial of William Palmer, the notorious "*Rudgeley Poisoner*", accused of the murder of John Cook. The prosecution's chemists strongly argued that Cook had been poisoned by strychnine, and the defence's (equally eminent) chemists' tests had not detected any strychnine.

Writing to the *Manchester Guardian* (Braid, 1856) two weeks before Palmer's execution, Braid describes experiments which proved that the defence's analysts had made a monumental error — given the (already forensically established) presence of antimony in Cook's body, they had tested for pure strychnine alone (i.e., rather than testing for the presence of *strychnine plus antimony*) and, from that, their standard colour test for pure strychnine was (inevitably) negative.

Braid's experiments demonstrated that, with exactly the same test, *strychnine plus antimony* consistently produced an entirely different colour (viz., indicating both an absence of *pure*

strychnine, and the presence of *strychnine plus antimony*) — thus strongly supporting the prosecution case.

2.2 Tsetse Flies

On reading of Livingstone's massive (African) losses of sheep and oxen due to tsetse flies (Livingstone, 1857, pp.80-84), Braid wrote to the *British Medical Journal*

[171]

knowledge of the subject.

According to my experience, although it is an undoubted fact that some patients can, even in this country [note the distinction Braid is making between the 'some' of his English patients and the 'many' of Esdaile's (apparently innumerable) non-European patients in far-away India], be reduced to such a deep state of hypnotism as to enable them to undergo severe surgical operations entirely without pain, I do not expect that hypnotism will ever become so generally available for such purposes in European institutions as chloroform.

This has been my recorded opinion, in several of my works, for the last seventeen years, and such seems to have been the experience of its powers for such purposes [recently] in Paris—in some patients the anaesthesia having been quite complete, but in the majority not so.

For curative purposes, however, for curing various disorders little amenable to ordinary medical treatment, hypnotism is far more valuable, when skilfully applied **in suitable cases**, as my almost daily experience of it during the last eighteen years has proved beyond all manner of doubt.

Fig.2b. Braid's response to the news from Paris (Braid, 1860d, p.312).

(Braid, 1858a, 1858b) suggesting the use of arsenic, based on the account of the Austrian physician, Johann Martin Honigberger, of a *fakir*, who having protected himself with a dose of arsenic, was unaffected by the bite of a poisonous viper — the lethality of its venom was verified when its bite killed a fowl immediately afterwards (Honigberger, 1852, pp.134-137). Braid's suggestion was adopted by Livingstone, as promised (see Livingstone, 1858) on his return to Africa, with great success.

3. Continental Interest in Hypnotic Anaesthesia in 1859

3.1 Paris

In late 1859, Braid learned (via TL.1, TL.2, etc.) that certain Parisian surgeons had successfully used *hypnotism* for anaesthesia – asking patients to stare at a spatula with an upwards and inwards squint, and, significantly, as Weitzenhoffer (2000) stresses, “no suggestions of anesthesia or analgesia were used” (p.35) – and that, in reporting their ‘pain-free’ surgeries, they had also declared that priority lay with Braid c.1842, and that hypnotism’s anaesthetic effects were indistinguishable from those of chloroform (with none of chloroform’s attendant dangers or unpleasant side-effects), and that, whenever the pre-operative time available and subject suitability were deemed appropriate, it was a choice well worth considering (Dechambre & Verneuil, 1859; Broca, 1859a-d). The surgeons were:

- Alfred Velpeau (1795-1867): Chair of Clinical Surgery at *Hôpital de la Charité*. The ‘pre-ether’ opponent of pain relief.
- Eugène Follin (1823-1867): surgeon, ophthalmologist. Inventor of the *Follin ophthalmoscope*.

[172]

- Charles-Pierre Denonvilliers (1808-1872): surgeon, anatomist. Pioneer of facial reconstructive surgery.
- Paul Broca (1824-1880): surgeon, anatomist, anthropologist. Discoverer of *Broca’s Area*, the first anatomical proof of localised brain function (see Schiller, 1992).
- Étienne Eugène Azam (1822-1899): archaeologist, surgeon, professor of Clinical Medicine in the School of Medicine at Bordeaux University. Founding secretary of the French Association for the Advancement of Science. Famous for his later work, centred on hypnotism and what Azam termed “double consciousness” (see Azam, 1892) with “Félida X” (Azam, 1876; 1887) – one of the earliest documented cases of “*multiple personality disorder*”, thought by many (e.g., Stiles, 2006) to have inspired Robert Louis Stevenson’s *Strange Case of Dr. Jekyll and Mr. Hyde* (1886) – and, also, noteworthy because his experiments with hypnotic anaesthesia (e.g., Azam, 1860) brought *hypnotism* (as distinct from *animal magnetism*) to the attention of Liébeault at Nancy.

3.2 Poitiers and Turin

Other French surgeons also experimented with hypnotic anaesthesia; for instance, in December 1859, Professor Jean Guérineau of the Poitiers Medical School, in the presence of colleagues, attempted to induce *hypnotism* by having his patient stare fixedly at a spatula. After five minutes without success, and his patient telling him it was hopeless, Guérineau realised that the problem was the onlookers’ loud private conversations. Guérineau demanded absolute silence, asked the

patient to start all over again, and, within five minutes of the “deepest silence”, the patient was anaesthetised, his leg was amputated in a minute and a half, and he experienced no pain at all (Guérineau, 1860). Also, on 26 December 1859 (an otherwise unidentified surgeon) “Dr Pertussio” painlessly removed a tumour using Braid’s procedure for anaesthesia at the *Mauriziano Hospital* in Turin (see BDM.1).

3.3 *Velpeau and the French Academy of Sciences*

Aware that Azam had relied upon Carpenter’s 1852 account of Braid’s technique (viz., Carpenter, 1852, pp.694-695) for his induction, Braid sent him copies of his publications (including his long out-of-print *Neurypnology*) asking that Azam’s associate, Velpeau (a Member of the French Academy of Sciences) present them on Braid’s behalf to the Academy. Velpeau did so at its 27 February 1860 meeting, and was asked to report back on their contents (LAS.1).

3.4 *Azam and “On Hypnotism”*

Also, on 22 March 1860 (three days before his death), Braid sent the unpolished, hand-written, (now lost) draft manuscript, known as “On Hypnotism”, dated 7 January 1860 (Braid, 1860a; Braid/Purcell, 1969/1860), to Azam as a personal gift; the manuscript, ‘cut and pasted’ from his earlier publications contains nothing to advance the material Braid presented in York and Glasgow in 1855.

[173]

4. *Braid’s Last Three Letters*

Braid’s last three letters reflect a significant reactivation of the dormant Braid in response to the Continental interest in hypnotic anaesthesia. Given the *British and Foreign Medico-Chirurgical Review’s* (i) favourable account of Braid’s work with both ‘therapeutic hypnotism’ and ‘hypnotic anaesthesia’, (ii) details of Azam and Broca’s recent successes, and (iii) speculations on the potential future applications of hypnotic anaesthesia (BFM.1), published the day after Braid’s death, one wonders what Braid’s response might have been; and, in particular, whether the renewed interest in his enterprise might have encouraged him to complete his long-promised master-work.

5. *Letter written on 28 January 1860*

5.1 *Kidd’s Letter*

On 30 December 1859, the chloroform advocate, Charles Kidd, MRCS (England) MD (Glasgow), having completely misunderstood the (chloroformic) implications of the recent Parisian ‘hypnotic anaesthesia’ events, wrote an uncharacteristically inaccurate letter to the *Medical Circular*, in which Kidd described a “mesmeric anaesthesia” experiment that had ended badly for him; and, as well,

condemned Elliotson's *London Mesmeric Infirmary* for (i) asserting outrageous applications for "mesmerism", and (ii) providing a location from whence, in a number of "[the] most deplorable and ridiculous surgical cases recently ... well-educated practitioners [took] recourse to the utter imbecility of *clairvoyance* in obscure cases, to help in their diagnosis" (Kidd, 1860a).

5.2 Braid's Response

On 28 January 1860, Braid wrote to the *Medical Circular* (Braid, 1860b), greatly upset at Kidd's conflation of his *hypnotism* with Elliotson's *mesmerism* (in particular, "making hypnotism responsible for what I have always viewed as unfortunate extravagances of the mesmerists"), when Braid had done everything possible — with his distinctive term "*hypnotism*" — "to separate [his] results from similar conditions induced by mesmeric processes" (see Fig.3).

Having corrected certain errors (including a 'typo') concerning matters of fact in Kidd's letter, Braid remarks that, in 19 years of using *hypnotism*, he had never, even once, experienced the circumstances that Kidd described; and, in passing, notes that it was "highly gratifying" to hear of the interest in *hypnotism* and its anaesthetic applications in Paris, Poitiers, and Turin. He also notes the recent strong support of his theories and practices from Paris (Dechambre & Verneuil, 1859) and from Edinburgh (Bennett, 1858); and, in relation to place of *hypnotic anaesthesia* within the entire realm of *hypnotism*, concludes,

I have been aware for the last nineteen years, from my own experience, that such insensibility [i.e., as has been recently reported from Paris, Turin, and Poitiers] can be produced in some patients by hypnotic processes; but I do not anticipate that it will ever become as generally successful for ensuring painless surgery as chloroform.

[174]

The term **hypnotism** was introduced by me, in 1842, to characterise the remarkable phenomena which might be realised in patients who throw themselves into a state of sleep, reverie, dreaming, catalepsy, or anæsthesia, or hyperæsthesia, with or without double consciousness—for any or all of these phenomena may be realised in different subjects, or even in the same subject at different stages—by their own unaided efforts, such as by staring at inanimate objects with fixed act of attention whilst engaged in such unexciting act.

I adopted this term, hypnotism, in order to separate my results from similar conditions induced by mesmeric processes, which depended, as was alleged by the mesmerists, on the transmission of some mysterious agency from the body of the operator, entering into the body of the subject, and there producing not only all my phenomena producible by hypnotism, but many more results of a highly transcendental character.

I alleged that I had proved the agency of hypnotism was entirely subjective [viz., 'of the subject', not opposite of 'objective'] in the patient and not dependent of any influence **ab extrâ** ['from the outside'], passing from the body of any other living creature to the subject.

For this reason, and also because I did not pretend by my hypnotic processes to produce clairvoyance and the other transcendental phenomena of the mesmerists, I adopted the new term, hypnotism, for the express purpose that the phenomena producible by hypnotism might be studied without any confusion or mingling of these results with those produced by the ordinary mesmerising processes, which were mixed up with so much of the mystical and marvellous as had excited a great prejudice against the whole inquiry, and which prejudices I wished to shield my investigations from, with all who were inclined to inquire candidly of my results.

Fig.3. The distinctive term “Hypnotism”, James Braid, 28 January 1860 (1860b, p.91).

Where the idiosyncrasy of the patient, however, is such as to render him or her susceptible of going into the deep anæsthetic condition by hypnotism, it ought by all means to be tried, as no possible harm can result from the trial if conducted with proper knowledge of the subject; and if it is found not adequate to accomplish the intended result, then recourse could be had to the use of chloroform, provided there is no such affection of the heart, brain, or lungs, as ought to forbid recourse being had to that potent anæsthetic agent.

I must now confess, as I have also done long ago, that it is not for accomplishing painless surgery with the inhabitants of this country that I anticipate the greatest boon to suffering humanity from hypnotism, but rather for the relief and cure of certain diseases which resist treatment by ordinary medical means, and of which my own experience has furnished ample proof ...

(James Braid, 28 January 1860 [1860b, pp.91-92])

[175]

6. Letter Written on 21 February 1860

6.1 Kidd's Second Letter

On 11 February 1860, Kidd wrote a second (even less coherent) letter (1860b), responding to Braid; and, given his advocacy of chloroform, Kidd is very critical of the dangers of ether. He's still violently opposed to Elliotson's '*mesmerism*' and the claims made for it. He derides Braid, not only for (i) citing Bennett's remarks on the influence of "predominant ideas", and (ii) his claims of hypnotic anaesthesia with suitable subjects, but also for (iii) claiming that, in his discovery of hypnotism (which Kidd firmly believes to be nothing more than a variant of Elliotson's '*mesmerism*'), Braid had clearly distinguished himself, his theories, and his practices from those of the mesmerists:

The word "hypnotism" is no doubt a very convenient one.

Infinite credit is due to Mr Braid for his effort, through its means to separate the grain from the chaff, the few facts of mesmerism from the mass of quackery and delusion with which it is surrounded.

At the same time no sensible person, who understands physiology, believes "that in mesmerism there is a transmission of some mysterious agency from the body of the operator, entering into the body of the subject", as objected by Mr Braid; so that he is arguing from an imaginary theory or abuse of one agent to the normal adaptability of another, a kind of logic always to be guarded against.

I cannot think either that Dr Bennet's [sic] view of the subject solves the riddle of hypnotism, viz., that the phenomena are wholly occasioned by permanent [sic] ideas in the individual: we might as well say that the sleep of chloroform is the result of some permanent idea.

(Charles Kidd, 11 February 1860 [1860b, p.112])

6.2 Braid's Response

On 21 February 1860, Braid wrote again (Braid, 1860c), clarifying Kidd's misapprehensions, correcting Kidd's errors (e.g., using "permanent" instead of "predominant"), and distancing himself, his theories, and his practices from the mesmerists' – stressing that their claim that "there is a transmission of some mysterious agency from the body of the operator, entering into the body of the subject" was "the chief gist of the argument between myself and the mesmerists, as to the nature and cause of the phenomena" (p.158) – and explaining his experience of "the hypnotic state" (p.158), and his experimental verification of the power of a 'dominant idea'; and, further, in relation to "response expectancy" (Kirsch, 1985, 1997, etc.):

Now, it would be interesting to try some experiments on patients who have been narcotised with chloroform or ether, to ascertain whether the power of suggestion could produce a repetition of the condition in them with equal facility, as the hypnotic state can be repeated merely through the power of suggestion.

Of course this ought to be tried, however, with such subjects as have never been hypnotised, for very obvious reasons.

(James Braid, 21 February 1860 [1860c, p.159])

[176]

Braid concludes his letter with a proposal for a future contribution:

In a future communication, with your permission, I may offer a few more remarks regarding hypnotism, hypnotic coma, and the analogy as well as difference which subsists between this and the coma induced by ether and chloroform, in the use of which I have had extensive experience, and I am glad to say I have never seen harm result either from the use of the one or the other, and I believe no harm will result from their use in the cautious mode I suggested before, in some papers published in the 'Medical Times', when ether was first introduced for anæsthetic purposes. Had the cautions suggested by me in these papers [viz., Braid, 1847a, 1847c] been adhered to, I have no doubt but there would have been fewer deaths from their use, and much less alarm entertained regarding these powerful agents—powerful for good or for evil, according to the caution or rashness displayed by those who administer them. (James Braid, 21 February 1860 [1860c, p.159])

7. Letter written on 26 February 1860

7.1 The News Item

On 25 February 1860, *The Critic* published a brief report (see Fig.4) of a communication made to the French Academy of Science by the eminent statistician, André-Michel Guerry (1802-1866) (viz., LI.1), about hypnotic anaesthesia and the attributions by Paul Broca (i.e., Broca, 1859a-d), Pierre Bazin (1807-1878) (i.e., Bazin, 1859), and Atto Tigri (1813-1875) of Siena (i.e., Tigri, 1860), of the discovery of hypnotism to Braid.

HYPNOPTISM, OR NERVOUS SLEEP, now exciting so much attention in the French medical world, and which was subjected to examination in this country in 1843, in consequence of the publication of Mr. Braid's work on the subject, now appears to have been known to Father Kircher and others two centuries ago. In his "Ars Magna", published in 1646, he describes various experiments on a fowl. He terms the phenomena **actinobolism**, or irradiation. Daniel Swenter, also, in 1636, recounts similar experiments. These facts were reported to the French Academy recently by M. Guerry.—*L'Institut*.

Fig.4. "Hypnoptism" [sic] news item, *The Critic*, 25 February 1860 (TC.1).

7.1.1 Schwenter and Kircher

The second part of his letter addresses Guerry's reported statements relating to Athanasius Kircher's (1602-1680) experiments with a chicken in 1646 (see Kircher, 1671), which replicated those conducted by Daniel Schwenter (1585- 1636), a decade earlier (see Schwenter, 1651), demonstrating what is now known as *tonic immobility*.

[177]

7.1.2 Actinobolism

The term actinobolism—an anglicisation of Kircher's *actinobolismus*, which was a calque of the Greek *ακτινοβόλος*, 'the sending forth of rays'—"ray-throwing" Rowland (2004, p.195), meaning "emanation of subtle *effluvia* from one body to another" (Coxe, 1808), with the embedded metaphysical notions of "action at a distance" (e.g., Hesse, 1961; Kovach, 1979), was used by Kircher (Kircher, 1671, p.107) in his (c.1646) discussion of various circumstances, including Schwenter's (c.1636) experiments with hens, to denote the transmission process through which "figments of the imagination could be projected" (Rowland, *ibid.*).

7.1.3 Actinism

Although derived from the same Greek word as Kircher's term *actinobolism*, the (later) technical term *actinism* is applied to something quite different.

In March 1844, one of the early investigators into the chemistry of photographic processes, Robert Hunt, FSS, FRS (1807-1887), having verified Sir John Herschel's conjecture that sunlight entailed three distinct classes of phenomena—namely, *light*, *heat*, and *chemical power*—proposed the term "*energia*" for the third (Hunt, 1844, pp.268-275). However, in his 3 March 1845 presentation to the Chemical Society of London (i.e., Hunt, 1845), Hunt announced that, consistent with the "*Actino-Chemistry*" nomenclature introduced by Herschel at the York Meeting of the British Association for the Advancement of Science in September 1844, he would now use the term "*actinism*" (see Fig.5).

What is Actinism?

Actinism is a term signifying **ray-power**, which has been adopted for the purpose of expressing the chemical action of the sunbeam.

According to the generally received views, the solar ray is regarded as exhibiting three forces: **light**, or luminous power; **heat**, or calorific power; and **actinism**, or chemical power: but whether these be regarded as distinct forces, or only as modified forms of one, the three phenomena are essentially dissimilar; hence the necessity of the term actinism, to distinguish the chemical (photographic) phenomena from heat and light

Robert Hunt, F.R.S.

Fig.5. What is Actinism? (Hunt, 1867).

7.2 Braid's Response

Braid's response (1860d) to *The Critic's* brief report is the last 'Braid letter' ever published. It was written on 11 February 1860, four weeks before his death.

Whilst noting that, despite *hypnotism's* extraordinary efficacy in appropriate cases, it was not "a panacea, or universal remedy" and, further, that not all individuals (whether 'hypnotisable' or not) were suitable candidates for *hypnotic anaesthesia*,

[178]

I was told about [Schwenter and Kircher's] experiments with fowls some time after I had promulgated my hypnotic theory and hypnotic processes.

The success of [Schwenter and Kircher's] experiments on fowls was alleged to depend upon some mysterious influence resulting from beginning the chalk line **beyond the tail** of the animal, then drawing it along the back, neck, head, and beak of the animal, and then prolonging the chalk line a considerable way **beyond the bill**, in a straight line.

Before ever having tried a single experiment with a fowl, I predicted that there was **no need** for the chalk to be carried **beyond the tail**, or **over that and the body**, and that the chalk line drawn from the bill of the bird only would be equally efficient, so as to be an object for the bird to gaze at and concentrate its attention upon, as a human subject did in order to become hypnotised by gazing at

Fig.6a. Braid's Experiments (Braid, 1860d, p.312).

Braid responds warmly to the news of the Parisian reports of pain-free surgery (see Figs.2a,b) and refutes claims that his hypnotic theories had been anticipated by Schwenter and Kircher. He also explains the substantial theoretical differences between his (by now well-established) physical, subject-centred theories of agency for *hypnotism* and its phenomena and the metaphysical, subject-external 'causative' theories of various Indian practices, and refutes any suggestion that they influenced the development of his theories and practices. As discussed earlier, in Part IV (Yeates 2018d, section 2.10, pp.69-71), Braid was asserting that, to the extent to which the Eastern mystics had 'done the right thing', they had 'done the right thing for the wrong reason', and were, therefore, guilty of committing an "error of the third kind" (Mosteller, 1948, p.61).

7.3 Braid and his Experiments à la Schwenter and Kircher

7.3.1 "Actinobolism" has no Relevance to Hypnotism

In relation to Guerry's emphatic declaration that Braid's *hypnotism* "was no new affair", "that it was known to Father Kircher", and that Kircher had "term[ed] the phenomena actinobolism, or irradiation", Braid observed that, rather than the experiments of Schwenter and Kircher having any connection with his "subjective [viz., 'of the subject', not 'the opposite of objective'] theory of hypnotism" at all, they actually offered insights into "the magnetic or irradiation theory of mesmerism": and, moreover:

[in relation to the] manifestly erroneous [assertion that Schwenter and Kircher's] experiments ... with fowls anticipated my experiments and theory of hypnotism ... I will venture to say that the "actinobolism or irradiation" of Father Kircher might as well, or even with more propriety, be adduced in proof that he knew and anticipated the *actinism* of Hunt of the nineteenth century.

(James Braid, 26 February 1860 [1860d, p.312])

[179]

any inanimate object; and I further alleged that there was no mystical agency of external communication in this experiment with the fowl more than in hypnotising human beings by my usual processes.

My very first experiments proved that my conjecture was correct; and even when the fowl was placed upon its back, and then made to fix its gaze upon the chalk line, or strip of white paper (which answers fully as well), it was equally affected as when placed prone; and, when placed upon its back, its legs became **cataleptic**, and **insensible to pinching its toes**, and it might now even be lifted from the table or floor by one toe, and keep its head close to the white line or strip of paper, as if tied to that spot by a cord.

I have performed experiments of this sort for more than eighteen years, and never failed with such experiments; and I have tried hundreds of fowls, and many of them before numerous spectators.

Fig.6b. Braid's Experiments (Braid, 1860d, p.312).

7.3.2 Braid's Experiments

Braid then describes his own experiments with fowls (see Figs.6a,b); i.e., those that did not involve his 'eye-fixation method' (à la Völgyesi). [At his twelfth lecture, at Liverpool, on 6 April 1842, Braid demonstrated both the Schwenter/Kircher chalk-line process on a fowl, and his own 'eye-fixation method' on a small poodle dog (LIM.1).] Braid's experiments were replicated (and expanded upon) by the experiments conducted by Claude-François Michéa (1815-1882) in the presence of Azam in late 1859 (Michéa, 1859; trans. at EMSJ.1), and by W T Preyer twenty years later (Preyer, 1878).

7.3.3 "Rationalization in Defense of Paranormal Belief"

Here, one is reminded of Alcock's discussion of "*rationalization in defense of paranormal belief*", in relation to the fierce claim, made by a devotee of spoon-bender Uri Geller, in 1976, during a display in which James Randi, the professional conjurer and active 'debunker', duplicated Geller's phenomena, that Randi was "a fraud"; and that—rather than being due to his surreptitious use of prestidigitation, illusion, or sleight-of-hand—Randi's 'fraudulence' was due to the fact that he was

secretly a psychic, and was “actually using psychic powers and misleading [the audience] by not admitting it” (Alcock, 2001, p.53).

In the same vein, we have (i) Sir Arthur Conan Doyle explaining the successes of ‘spiritualist debunker’ Harry Houdini as being due to his actual possession of (undeclared) *supernatural powers* (Doyle, 1927a, 1927b), (ii) Elliotson’s declaration, following his only meeting with Braid, of Braid’s “possession ... of an unusually powerful magnetic temperament, ... a large brain, a large capacious chest, and great mental energy, i.e., ... a determined *will*” (Braid, 1852, p.37), and (iii) Mayo’s declaration, also from direct experience of Braid and his techniques (both as subject [180] and observer), that Braid’s success was due “to his personal Od-influence” and, further, that his *hypnotism* was, in fact, “disguised mesmerism” (Mayo, 1851, p.239).

7.3.4 Braid the ‘Secret Mesmerist’

Braid cautions his readers from presenting his experiments with fowls as proof of his “*subjective* [viz., ‘of the subject’, not ‘the opposite of objective’] theory of hypnotism”, because his practical experience was that the mesmerists would immediately argue—driven by theories that had much in common with Kircher’s—that “the entrancing of the fowl arose from the communication of a magnetic field or force (Mesmer), or on actinobolism or irradiation (Kircher) ... during the personal contact of the operator with the fowls”, in the same way they routinely attributed his hypnotisation successes to his transmission of ‘mesmeric forces’:

the mesmerists have generally attributed my success [in] hypnotising patients [to] the irradiation of the mesmeric fluid or force from my own person, projected from my eyes, whilst staring hard at my patients during my hypnotising processes; or, that the mesmeric force was projected from my body into the body of the patient, through the medium of the object held in my hand, which they were requested to gaze at.

Nay, some mesmerists have even gone so far as to allege that such transference of my magnetic force took place and affected the patients if I was merely bodily present in a room, when patients were hypnotising themselves by attending to a certain personal process which I had presented for the purpose.

My magnetic force was still, in the estimation of the mesmerists, acting upon the patients *unknown to myself*, as “the man in the room” (Townsend [i.e., Townshend, 1854, p.11]): and, in order to prove the fallacy of this fancy, I have got patients to hypnotise themselves by gazing at inanimate objects with fixed act of attention when I was out of the room, and even when we were miles apart, and when I knew nothing of their whereabouts or of their intentions. and yet still the results were the same.

(James Braid, 26 February 1860 [1860d, p.312])

7.4 Braid and the Hindus, Fakirs, and Yogis

In the final section of his last letter, Braid refers to “the practices of the Hindoos, the Fakirs and Jogi amongst whom have been in the habit ... for the last 2400 years ... of throwing themselves into their ecstatic trances ...for religious purposes ... by processes somewhat analogous to, but yet not identical with my hypnotising processes”.

Braid notes that “it was not until three years after I had devised and practiced my own methods that I became acquainted with these curious practices of the Fakirs and Jogi of India [through] Ward’s ‘History of the Hindoos and the Dahistan’ [Braid mistakenly conflated the titles of the two works: viz., Ward, 1822, Vols.I-III, and Shea & Troyer, 1843, Vols.I-III]; and, in fact, he only became aware of these works ten months after *Neurypnology* was published (per medium of REIS, 1844).

[181]

From studying these works, Braid soon concluded that, “the theoretical notions of these Eastern enthusiasts and [his] own regarding the cause of the trance-sleep, and also of various phenomena manifested, and the extent of our respective belief regarding phenomena manifested during the trance-sleep, are [as] wide as the Poles asunder”.

[Notwithstanding this disparity, however], both of our processes and results go to prove the *subjective* nature [viz., ‘of the subject’, not ‘the opposite of objective’] of the agency required to produce the trance-sleep.

The Hindoos accomplished it by each gazing fixedly at the tip of his own nose, or some other part of his body, or some ideal object, as one of their gods, with suppressed respiration, and a predominant idea in their minds that such and such results and revelations are to be realised by them; and sure enough, such anticipations really are realised by them, as they suppose *as realities*, but which I interpret as merely vivid dreams.

They believe that the souls of some of the most advanced in the mysteries can leave the body and roam throughout all creation, see everything, hear everything, know the thoughts of all, acquire universal knowledge, and return and resume their mortal body again at will; or that they can enter the body of a dead animal, through the path of the senses, and in that body act as if it were a living body; on all these occasions returning again at will, and taking possession of their old bodies, and acting through them as was their wont before they undertook these spiritual ramblings.

I can readily enough excite equally absurd dreams in hypnotised patients, who go into the second-conscious stage of the sleep, merely by sending them to sleep with such and such ideas in their minds as about to be realised during the sleep; or, still better, by auricular suggestions, by words spoken to them to that effect, when they have arrived at the proper stage of the sleep.

I can easily make such subjects both talk and act according to the suggested ideas of their vivid minds; but the Fakirs and Jogis believe the whole as *real*, however absurd or *impossible* the suggested feats may be.

Now, setting aside the absurdities and extravagances of these enthusiasts regarding their assumed higher phenomena as endowments flowing from the alleged high sanctity of the devotees after they have submitted themselves to certain severe practices and endurances, still we have the undoubted fact of the general success of their *personal* processes for throwing themselves into their trance-sleep; and I think this is one of the strongest proofs which could be adduced in support of my *subjective* theory: or, in other words, both their method and my hypnotic processes incontestably prove that the trance-sleep can be induced by influences residing entirely *within*, and *not without*, the patient’s own body. —I am, Sir, yours, &c. James Braid.

(James Braid, 26 February 1860 [1860d, p.312])

[182]

8. *Braid's Death*

Braid died on the morning of Sunday, 25 March 1860 (see Fig.7). His death certificate stated “natural causes”; and Wink’s direct enquiries (1969, p.86) to the Manchester coroner in the late 1960s indicated that no autopsy had been conducted at the time.

Among other matters, the obituary in the *Manchester Guardian* noted that, “Braid had much more than a local reputation; which was due, not alone to his theory of hypnotism, which, some years ago, he pertinaciously but temperately advocated in opposition to that of mesmerism, *but very greatly to his skill in dealing with some dangerous and difficult forms of disease* (TMG.2, emphasis added).

SUDDEN DEATH of MR. JAMES BRAID, SURGEON, of MANCHESTER.

The sudden death of Mr. James Braid, surgeon, of Manchester, which took place on Sunday morning, at his residence, Rylaw House, Oxford-street, in that city, is a subject of much regret.

He had been in apparently good health all last week, and had made his usual calls upon his patients, displaying the quiet cheerfulness in his interviews with them. which generally characterized his demeanor [sic].

On Sunday morning he complained of pain up the spine of his back and coldness, and ordered a cup of tea.

After partaking of it, he breathed heavily several times, and died almost immediately, it is supposed from disease of the heart.

He was best known in the medical world from his theory and practice of hypnotism, as distinguished from mesmerism—a system of treatment he applied in certain diseases with great effect, and which has recently attracted great attention in Paris.

Long before his discovery of hypnotism, however, he had performed some extraordinary cures by operations on contracted muscles, in cases of club-foot and similar contortions, which brought him patients from every part of the kingdom.

In addition to a large circle of friends whom his warm-hearted and genial bearing and professional skill attached to him amongst the wealthier classes of society, and amongst the medical profession, he will be much regretted by the humbler classes, whose sufferings under disease he often succeeded in alleviating without recompense.

Fig.7. Braid’s Obituary, *The Lancet*, Saturday, 31 March 1860 (TL.3).

He was buried in plot LL09 in the churchyard of St Mary's and St Helen's Church, High Street, Neston, Cheshire (see Gow, 2016).

[183]

9. *James Braid REDUX*

Having devoted the greater part of these six articles to positioning Braid in his own time and place as an important, significant agent of innovation and, in doing so, examining his personal, intellectual, and professional background in order to understand just how well prepared he was, at the age of 46, to 'discharge the duties' of his unique position as the discoverer, innovator, protector, defender, and promoter of *hypnotism*, it seems important to conclude with a brief overview of his life, works, and accomplishments.

9.1 *Family*

James Braid, the seventh and last child of James Braid and Ann Suttie, was born on 19 June 1795 in Kinross-Shire (today, it's in Fife). The family belonged to the group known as "*Dissenters*" that had broken from the Established Church of Scotland following the General Assembly of the Church of Scotland in 1732. He married Margaret Mason, in Edinburgh, on 17 November 1813. They had two children: Anne (1820-1881), and James (1822-1882). He died in Manchester on 25 March 1860.

9.2 *Sagacity*

Braid was an inquisitive, highly intelligent, motivated individual, possessed of an active mind, a natural capacity for structured thinking, a propensity for central route processing, and a high *need-for-cognition* (see Part I, Yeates, 2018a, pp.15-16); and, from this, a strong and relentless desire to 'understand' — not only to 'understand' *that* so-and-so occurred, and *how* it occurred, but also *why* it occurred, and *in what way* the occurrence in question was inevitable (i.e., could have been reliably predicted) — rather than, that is, to just 'accept' or 'believe'. There are several examples of Braid's *serendipity*: viz., accidental discoveries, of things 'hidden in plain sight', made by one sufficiently sagacious to apprehend the connection between items that appear random to others (Walpole, 1840/1906, pp.365-366) — e.g., recognising the upwards subject-to-operator *sense* of the superior-operator-to-inferior-subject *direction* as *THE* significant component of Lafontaine's method, and not the downwards operator-to-subject gaze as Lafontaine supposed (see Part II, Yeates 2018b, p.64, Fig.7).

9.3 *Character*

Of average height, and strongly built, Braid spoke calmly, with authority and a well-modulated, deep voice. He used the King's English clearly, without any significant Scottish burr. He was an excellent speaker; could project his voice well, and often spoke to audiences of more than a

thousand in public halls that were far from acoustically perfect. He was a competent pianist, a fine singer, with a good ear for music—the reports on the visit of the “Swedish Nightingale”, soprano Jenny Lind, to Braid’s home on 5 September 1847 (e.g., TMG.1) attest to his piano skills and his pleasant bass voice (also, that he was confident enough in his voice to sing in her presence).

He was renowned for his kindness, sympathy, and concern for his patients, and his care for the infirm, disadvantaged, and indigent (e.g., his regular contributions to the [184] support of two blind beggars: see Fig.8). His specialisations in the physical correction of squint, club-foot, stammer, spinal curvature, etc. (obviously, far greater handicaps for the less-well-off than the better-off) were probably driven by such gentle motives. His obituaries paid tribute to his generosity; noting that he treated many without charge, and often refusing fees when offered. Gauld (2004, p.281) notes that his estate was less than £3,000; which, from the figures supplied by Peterson (1978), appears to be much less than a years’ income of a surgeon of Braid’s standing.

UNGRATEFUL THIEVES.

A blind man, named Thomas Fletcher, and a boy, named Michael Hayes, who is also blind, were brought up at the Borough Court on Saturday last, charged with stealing, under the following circumstances:

Mr. Beswick, the superintendent of the court, stated, that the prisoners were beggars, and went together.

They were in the habit of calling at the house of Mr. Braid, surgeon, Piccadilly, who furnished them gratuitously with medicine, and also contributed towards their support.

Mr. Braid had frequently missed bottles during the last three months; and, on Thursday, the prisoners were seen by the servant to take some bottles out of the waiting-room.

They went to Mr. Braid’s again the following day, when an officer was called in, and they were given in to custody; and, from inquiries, it was ascertained, that they had sold twelve dozen of bottles at a rag and bone shop in Dole Field.

Ann Cartwright, a servant in Mr. Braid’s employ, and police constable M’Elroy, then gave evidence to the above effect; the prisoners, who said nothing in their defence, were committed for trial at the ensuing sessions.

Fig.8. Evidence of Braid’s Charity and Generosity (TMG.2).

9.4 Schooling

Braid grew up on a working farm, and had his strength, courage, observations of nature, mechanical aptitude and inventiveness constantly challenged by his brothers and the other farm workers. Whilst nothing is known of his schooling, Wink (1969, p.16) is certain that he attended the local school, where he was taught to enjoy the classics and encouraged to pursue the wide range of intellectual interests he later displayed. Wink also believes it was the direct experience of the drunken violence of the schoolmaster, David Ireland, that made Braid abhor “immoderation” or “brutality” and fostered the “rectitude and insistence on the truth” he later displayed in his sensitivity to any level of misrepresentation of his stated position.

It would also explain his well-attested capacity to fearlessly speak his own mind (even if his views were unpopular), his refusal to be cowed or intimidated by powerful, [185] well-connected opponents—individual (e.g., Hugh M’Neile) or collective (e.g., the Medical Section of the BAAS)—his fearless confrontation of physically menacing individuals (e.g., the pugnacious Edward William Binney, FRS, “a large and imposing man, whose remarkable outspokenness was considered ‘ungentlemanly & disgusting’ by his enemies” [Secord, 2004], whom Braid, as honorary curator of the collection of the Manchester Natural History Society, confronted in 1859 [see Binney, 1859, and Braid, 1859]), and his strong intolerance of injustice.

9.5 Professional Education

For a strong, dexterous, intelligent, and inquisitive young man, with an eager desire to understand, rather than learn by rote, a surgical apprenticeship under the supervision of the *Royal College of Surgeons of Edinburgh*—one of the oldest medico-surgical organisations in the world—was an ideal choice; and, as future events clearly demonstrated, the five years Braid spent as an apprentice clearly equipped him for his later professional life, surgical career, and extended investigations into, experimentation with, and active promotion of *hypnotism*.

9.5.1 Apprenticeship

The Royal College of Surgeons of Edinburgh set out a well-structured syllabus for qualification to membership in 1806 (see Inglis, 1809); which, at the time, reflected the highest standards in the entire British Empire. An apprentice’s daily on-the-job training was reinforced by specific instruction from designated university lectures, by extra-mural classes taught by College-approved experts, and by the in-house training that College Fellows gave their own apprentices from time to time.

Unlike the situation in Europe, where surgeons were “[expressly] excluded from the universities” and “[forced to create] separate educational institutions to train their students and apprentices”

(Rosner, 1991, p.87), student surgeons in Edinburgh had unlimited access to all university lectures – and, significantly, not just those medical faculty lectures prescribed (or not prescribed) by the College. Braid not only successfully took the College’s prescribed ‘medical’ courses at Edinburgh University from 1812 to 1814, prior to his advanced clinical training at the Royal Edinburgh Infirmary, but also attended the moral philosophy lectures of Thomas Brown (see Part I, Yeates, 2018a, pp.21-22). As Smith (1883, p.124) noted, the virtue of attending Edinburgh in Braid’s day was that “[one could] study medicine and receive a university education at the same time”.

An Edinburgh apprenticeship was undoubtedly the best way for an aspiring surgeon to acquire a thorough practical knowledge, on-the-job experience in the conduct of a surgical practice, and the confidence, theoretical understanding, medical knowledge, and physical skills necessary for one’s subsequent success as a surgeon. Edinburgh surgeons were trained to treat internal as well as external disorders and, also, were trained as *accoucheurs* (‘male mid-wives’), and apothecaries; and were not just equipped to commence a practice, but were sufficiently well equipped to sustain a long-term, independent professional practice (see Part I, Yeates, 2018a, pp.19-21).

[186]

9.5.2 *Thomas Anderson and Charles Anderson*

At the age of fourteen, Braid was indentured to the Leith surgeons, Thomas Anderson (1743-1813) and his son, Charles Anderson (1772-1855). He remained with them for five years (rather than the compulsory four). As demanded by the College, not only were both Andersons Fellows of the College, but both had also trained as apprentices. Not only well-respected surgeons, but also scholars and scientists of some repute, they encouraged Braid’s wide interests in philosophy and natural science:

As an apprentice, Braid’s first contact with patients took place long before he had any medical knowledge.

This developed a strong set of inter-personal skills; and, unlike book-oriented scholars – to whom patients were little more than vehicles that brought ‘the disease’ to them – Braid never forgot that the individual that ‘had’ the disease was, generally, far more important in the overall scheme of things than the disease they ‘had’.

Finally, he acquired a capacity for continuous, self-directed professional development, as well as the drive to independently pursue the individual mastery of relevant knowledge and skills. ...

[As an apprentice, Braid] was taught the principles and practice of surgery in a very structured fashion.

Constantly exposed to Ernst Mach-type thought experiments (see Mach 1926/1976; Matthews, 1988; and Yeates, 2004), he was questioned on the anatomy and physiology of the part of the body about to be operated upon, asked what sort of incision should be made (and in what direction), what he expected to discover, how what-he-expected-to-discover should be dealt with, what else might be there, and how that ‘something else’

might be dealt with, and how the incision should be closed.

He would watch the surgeon at his work; and, once the operation was over, the surgeon would question Braid in relation to what had actually taken place—especially if there were differences between Braid’s pre-operative speculations and the events of real operation.

So, long before he ever performed even the smallest part of the simplest operation, Braid gained invaluable experience in both the pre-operative diagnosis and assessment of cases, and the post-operative care and treatment after particular surgical interventions; something which would have fostered the development of his bedside manner.

In a time without anaesthesia, he would have immediately understood the need for forethought, speed, and accuracy.

(When eminent surgeon Robert Liston (1794-1847), performed his first operation under ether (in 1846) he amputated an entire leg (mid-thigh) in 28 seconds, including the suturing.)

[Braid’s] detailed knowledge of anatomy and physiology, his training in midwifery, and skill as a surgeon, is clearly shown by his performance, on several occasions, of the very dangerous (due to the high mortality rate) and extremely-rare-at-that-time surgical procedure, known as a Caesarian [187] section—and, in 1851, he noted that, although a *Caesarian* section was, indeed, a “formidable” and “important” surgical operation, “it involve[d] comparatively little difficulty to those well acquainted with the anatomy of the parts, and are in frequent habit of operating” (Braid, 1851b, p.239).

(Yeates [Part I, 2018a], pp.21, 23-24)

9.5.3 *The Royal Medical Society of Edinburgh*

Although he was an apprentice surgeon, rather than MD student, Braid regularly attended the weekly meetings of the *Royal Medical Society*, where he learned how to understand, analyse, and criticise the arguments of others, and how to conceive, structure, deliver, and defend one’s own arguments (see Part I, Yeates, 2018a, p.21).

9.6 *Qualifications, Affiliations, etc.*

Having successfully completed his five-years’ apprenticeship as a surgeon-apothecary, his three-years’ formal studies at Edinburgh University, and having passed all of the College’s required examinations, Braid was admitted to the *Royal College of Surgeons of Edinburgh* as a Member in 1815; and, not long after its (1832) foundation, he was also admitted to the *Provincial Medical and Surgical Association* (which, later, became the *British Medical Association*) as a Member.

Despite having trained in Scotland as an apprentice, and despite not having graduated MD, he was registered, right from the outset, as an approved Medical Practitioner under the *UK Medical Act 1858*.

He was admitted as a Corresponding Member (i.e., one who, located elsewhere, communicated by correspondence) of the *Wernerian Natural History Society of Edinburgh* (in 1823) and the *Royal Medical Society of Edinburgh* (in 1854).

He was also a Member of the *Manchester Athenæum for the Advancement and Diffusion of Knowledge*; and the Honorary Curator of the museum of the *Manchester Natural History Society*.

In relation to *hypnotism*, it is a matter of record that he was always open to receiving his professional colleagues. There are many references to visits from different professionals attesting to the generosity of Braid's hospitality and willingness to demonstrate and discuss his procedures.

9.7 Professional Practice

As a College supervised, apprentice-trained surgeon, and having been admitted to the Royal College of Surgeons of Edinburgh as a *Licentiate* (thus, **MRCSE**, rather than **FRCSE**) on 11 November 1815, Braid was entitled to practise independently, without supervision, as a *surgeon*, an *accoucheur*, and as an *apothecary* (i.e., as distinct a *physician*, whose domain was restricted to the delivery of *physic*, 'medicinal drugs', alone).

[188]

9.7.1 Leadhills (1816-1825)

In early 1816, Braid was appointed surgeon to the remote mining community at Lord Hopetoun's mines at Leadhills. He received a horse, a house, and a salary from *The Scotch Mining Company* as well as "the gains of his practice" ("J", 1823, p.27, 29); and,

in addition to providing treatment for illness (e.g., Braid, 1825), and micro-surgery for injury (e.g., Braid, 1816), Braid had to deal with the consequences of the harsh climate and industrial accidents (e.g., Braid, 1817a).

He was responsible for the detection, surveillance, and prevention of occupational disease, occupational safety, and injury prevention (e.g., Braid, 1823b), as well as dealing with the ever-present threat of lead poisoning in both the human population ('*mill-reek*': see Risse, 2005) and their animals ('*lead-brash*': see Peterkin, 1799).

Braid would, later, in the 1832 Manchester cholera epidemic, display the same preventive orientation, protesting in relation to the "pestiferous emanations" from the open grids of the sewer system (Braid, 1853b) affecting those living in the underground, dark, unventilated cellars (Engels, 1887, pp.64-67 estimated that 12% of Manchester's c.1842 workers resided in windowless "cellar dwellings").

He also continued to pursue the natural philosophy and scientific interests he had developed in Leith (e.g., Braid, 1817b, 1823a).

(Yeates [Part I, 2018a], p.25)

9.7.2 Dumfries (1825-1828)

In 1825, Braid moved to Dumfries, commenced a private practice, and encountered William Maxwell, MD (1760-1834), one of Scotland's most able surgeons. Through that association, Braid was exposed to Maxwell's extensive (military and civilian) clinical experience and surgical techniques: including the use of hair (rather than silk or catgut) ligatures, the post-amputation binding of arteries, rather than cautery, and the use of 'short-cut' ligatures—all of which

significantly reduced postoperative recovery time and post-operative irritation, congestion, and infection (see Yeates, Part I, 2018a, pp.25-26).

9.7.3 *Manchester (1828-1860)*

On the urging of one of his patients, Braid left Dumfries in 1828, moved to Manchester, and practised there until his death on 25 March 1860. As well as his valuable contribution as a medical officer during the cholera epidemic of 1832 (which killed more than 700 in Manchester), he made a difference: he donated books to the Manchester Free Library, and was involved in important community matters, such as reducing young people's working hours, and long-overdue improvements in sanitation (see Fig.9).

Once in Manchester, Braid conducted a general practice; and specialised in the treatment of difficult and unusual cases. In particular, he concentrated on the treatment of various deformities; and, by March 1841, in addition to a limited number of surgeries to correct speech impediments (principally stammering), he

[189]

[Aside from his interest in hypnotism, Braid] took an active interest in sanitary matters.

He volunteered for service during the cholera epidemic of 1832, and many years later he described in a letter to the press [Braid, 1853b] the awful conditions of the cellar dwellings in Manchester.

He stated that the open gratings of the sewers were close to these dwellings and opened on a level with their floors.

He advocated the use of proper [stench] traps, and suggested that the air from the sewers should be passed through fires before being allowed to escape into the atmosphere.

That he kept in touch with general science may be argued from the fact that in his later years he was honorary curator of the museum of the Manchester Natural History Society.

Personally, Braid was a striking figure.

His portrait in the Manchester Medical School [Part I, Yeates, 2018a, Fig. 1, p.7] confirms the impression of energy and self-assurance which his writings suggest. One suspects him to have been a Scot "with a good conceit of himself".

Orthodox medicine in the city may have fought shy of him, but he certainly did not lack friends.

Accounts of him speak of his high personal character, his jovial nature, and the warmth of his friendship.

They add that by his death the poor of the city lost a good friend.

Fig.9. 'James Braid of Manchester' (extract): George Fletcher (1929), p.777.

had operated on more than 900 cases of club-foot, knock-knees, bandy-legs, spinal curvature, and squint (see Yeates, Part I, 2018a, pp.27-31).

These interventions attest to (i) his professional courage as an 'early adopter', (ii) his propensity for the objective, incremental examination of his on-going clinical experience as a surgeon, and (iii) his constant perfecting of his strategies and techniques; and, moreover, they demonstrate that, apart from any future connection with *hypnotism*, Braid was already destined to be an influential figure in the medical profession in the nineteenth century.

His capacity for analogical thinking extended his successful corrections of club foot, based upon the overall strategy of ‘loosening the tight’ and ‘lengthening the short’, ‘tightening the loose’ and ‘shortening the long’, and/or ‘firming the flaccid’, ‘activating the listless’, and ‘rousing the dormant’ — achieved through surgery, bandaging, and extension (supported by a splint of Braid’s invention) — into interventions for squint, lateral spinal curvature, bandy legs, knock knees, and stammering (e.g., Braid, 1841), and his later application of the same strategic principles to the treatment of spinal curvature by *hypnotism* alone (e.g., Braid, 1855a).

[190]

9.8 Publications

As a measure of Braid’s extraordinary ‘boundary-work’, as one of just 52 admitted to the *Edinburgh Royal College of Surgeons* as “Members” on 11 November 1815 (RCSE.1), Braid had more than ten times the publications of all the others put together.

Apart from his many (more than seventy) articles, letters, etc. published in the professional journals (the 19th-century equivalents of today’s *British Medical Journal*, *New England Journal of Medicine*, etc.), magazines, and newspapers (see Yeates, 2013, pp.479-544), he also wrote a number of works, some ‘original’ and others accumulations of already published items, including:

1842: *Satanic Agency and Mesmerism Reviewed* (Braid, 1842).

1843: *Neurypnology* (Braid, 1843).

1846: *The Power of the Mind over the Body* (Braid, 1846).

1850: *Observations on Trance; or, Human Hybernation* (Braid, 1850).

1851: *Electro-Biological Phenomena Considered Physiologically and Psychologically* (Braid, 1851a)

1852: *Magic, Witchcraft, Animal Magnetism, Hypnotism, and Electro-Biology* (Braid, 1852).

1853: *Hypnotic Therapeutics* (Braid, 1853a).

1855: *The Physiology of Fascination, and the Critics Criticised* (Braid, 1855b).

There are also three unpublished (now lost) draft manuscripts, written in English, that only survive in their German translations:

1845: *On the Distinctive Conditions of Natural and Nervous Sleep*, dated 17 December 1845 (Braid, 1845).

Translated into German (as “*Über die Unterschiede des nervösen und des gewöhnlichen Schlafes von James Braid 1845*”) by Preyer (1890, pp.177- 208). Preyer’s version has been translated into English (at Braid/Purcell, 1969/1845).

1855: *The Critics Criticized*, dated 23 October 1855 (Braid, 1855c).

Translated into German by Karl Frommann as “*Kritik der Kritiker*” (at Preyer, 1882, pp.265-275), Frommann’s version has been translated into English (at Braid/Purcell, 1969/1855). [Despite its title, it’s significantly different from “*The Critics Criticised*” appended as the second half of Braid (1855b).]

1860: *On Hypnotism*, dated 7 January 1860 (Braid, 1860a).

Translated into German (as “*Über den Hypnotismus*”) by Preyer (1881, pp.59-96). Preyer’s version has been translated into English (at Braid/ Purcell, 1969/1860).

10. Braid and Hypnotism

By this stage, readers will have discovered the authentic James Braid, and gained an accurate understanding of the history, theoretical development, and practical evolution of Braid’s *hypnotism* — as distinct from Liébeault and Bernheim’s (much later) far-less-efficacious (‘*dormez, dormez, dormez*’) suggestion-based “*hypnosis*” (see, for instance, Yeates, 2016c, pp.56-58) — and acquired a far more realistic, far more detailed, and far better way of thinking about Braid; and, of equal importance, about *hypnotism* itself.

[191]

Braid made a considerable contribution to natural philosophy and to the practice of medicine and surgery; and, beyond that, entirely in the spirit of the Scottish Enlightenment, he brought great benefit to society at large through his ‘boundary-work’ efforts to explain and promote *hypnotism* to the academic, philosophical, and medical worlds.

Hopefully, in the spirit of the precept that, “*if your history isn’t what you thought it was, [then] you aren’t who you thought you were*” (Hollaway, 2018, p.39) and, rather than deceptively changing one’s history to match one’s ‘imagined self’, actively and deliberately *changing who-one-thinks-oneself-to-be to match one’s ‘true’ history*, as one would be forced to do in consequence of a DNA-test’s unexpected paternity revelation, readers will have now come to possess a far more realistic understanding of the *hypnotism* (the ‘original gene-pool’) that has been so relentlessly written out of the disciplinary history (by the emphasis on distant ‘hybrids’).

10.1 Braid’s “*Experimentum Crucis*”

Braid attended Lafontaine’s ‘magnetic demonstrations’ on 19 and 20 November 1841 and not only satisfied himself that a genuine transformation — from *condition*₁ to *condition*₂, and back to *condition*₁ — had really taken place in Lafontaine’s subject as a consequence of Lafontaine’s intervention, but also, he was certain, had revealed the ‘true’ cause of the transformation.

On Saturday, 20 November 1841, having returned home from Lafontaine's demonstration, Braid conducted his *experimentum crucis*, in consequence of which, per medium of "*a fixed and abstracted attention of [his] mental and visual eye*" upon a single object (in this case, the stopper of a wine bottle) "*not of an exciting nature*" (*Neurypnology*, p.12, emphasis added), his eyes closed within minutes.

Thus, in one fell swoop, he not only proved that Lafontaine's phenomena were not due to 'magnetic agency', and that it was a subject-internal procedure (therefore, not requiring an operator), but also that it was due to the upwards-and-inwards gaze of the subject (therefore, of physiological, rather than metaphysical, or mental agency).

On Monday, 22 November 1841, following his success with self-induced *hypnotism* on the Saturday evening, Braid performed his first hetero-hypnotic induction (in front of witnesses, at his own residence).

10.2 Braid's Fifteen Public Lectures

The sudden (and remarkable) emergence of James Braid, public speaker, popular educator, and scientific demonstrator on 27 November 1841, just seven days after his *experimentum crucis*, and just five days after his first act of hetero-hypnotisation, and the lucid, coherent explanations he delivered, certainly attest to his exceptional capacity for structured thinking. It is also significant that there's no record of Braid ever lecturing in public on any subject before that evening.

[192]

Braid's first set of lectures were designed to convince the public that Lafontaine's claims of 'magnetic agency' were false. Having done so, and having engaged in the non-medical, purely *scientific* pursuit of "dispelling mystery" and "eliciting truth" — i.e., nothing to do with medicine, surgery, or any other therapeutic application — Braid announced that his third lecture (8 December 1841) was his last.

Within ten days however, Braid re-emerged and began his second set of lectures (i.e., 17 December 1841 to 22 January 1842). Rather than concentrating upon Lafontaine, he began promoting his own induction method, his on-going investigations into the application (clinical and otherwise) of effects elicited by his method, and his ever-expanding understanding of the nature, scope, and range of conditions for which his methods might prove efficacious.

His remaining nine lectures (1 March 1842 to 28 April 1842) — and, of course, the lecture, demonstration, and *conversazione* delivered to BAAS delegates on 29 June 1842 — all display a relentless, gradual, and very substantial shift from Braid, the philosopher and gentleman scientist (the side-line commentator) de-bunking Lafontaine, to Braid, the structured thinker and surgeon

(the on-field participant) reporting on the physiological and therapeutic consequences of his own methods, further developing his applications in the light of his observations of the practices of others, strongly defending his own position, and continuing to lecture in public, before returning to his medical practice in order to compile and publish *Neurypnology* in mid-1843.

10.3 Braid's Knowledge Dissemination

The incremental evidence painstakingly presented in Braid's own writings, the eyewitness accounts of Braid at work, and, in particular, in his efforts to maximise "the efficiency with which [his] discoveries [were] evaluated, diffused, and incorporated into the body of scientific knowledge" (Cole, 1970, p.286), attest to a deliberate and relentless extension, refinement, and development of his enterprise in the 18 years following his *experimentum crucis*. Braid did all he could to disseminate his simple (i.e., non-complex), realistic, and non-mystical understanding of *hypnotism* and hypnotherapy – with its embedded "vitalistic", rather than "mechanistic" orientation – and the rational, easily understood (top-down) *monoideodynamic principle of action* with which he non-controversially explained its efficacy to members of the general public, natural philosophers, and the general medical profession.

10.4 Braid's Timeliness

[A] new theory should proceed from some simple, new, and powerful, unifying idea about some connection or relation (such as gravitational attraction) between hitherto unconnected things (such as planets and apples) or facts (such as inertial and gravitation mass) or new "theoretical entities" (such as field and particles).

(Karl Popper [1963, p.241])

[193]

Braid's watershed discoveries were remarkable because they not only identified "true things about the world", but also "significant true things" that were "scientifically interesting" (Weisberg & Muldoon, 2009, p.229). Further, and as discussed in Part III (Yeates, 2018c, p.5), Braid's discoveries were neither 'postmature' nor 'premature'; they were 'timely'.

Using the *connected-with-generally-accepted-('canonical')-knowledge* measure of Stent (e.g., 1972, p.434) as an index of 'timeliness', Braid's use of the established contemporary knowledge of physiology, optics, and the nervous system – and his use of easily understood, technically achievable methods, clearly expressed in comprehensible terms, with implications well capable of being appreciated – to explain his antecedent 'double internal and upward squint' induction, and consequent 'artificial condition of the nervous system' certainly meets that criterion.

Using the criteria of Engelbart (1963), it is clear that, by linking his *hypnotism* discoveries to the (disciplinary) 'canonical' knowledge of his day, by creating his taxonomical representations in such a rational, structured way, and by developing such a precise, distinctive set of technical

terms, Braid allowed his professional colleagues and contemporaries to (i) sort out what was otherwise a “tangle of thoughts”, (ii) “integrate [their] new ideas more easily”, and (iii) “harness [their] creativity more continuously” (p.7), in order to (iv) *comprehend* “complex situations”, *isolate* “significant factors”, and *solve* “problems” (p.3)—and, parenthetically, it’s very clear that, apart from this ‘literal’ linkage with the (professional) ‘canonical’ knowledge of his day, given that his explanations and representations were delivered in the context of what others believed, accepted as fact, or assumed to be the case, it can also be said that Braid ‘figuratively’ linked his discoveries to the (lay) ‘canonical’ knowledge of his day (i.e., the so-called *consensus reality*).

Braid’s later research into *ideodynamic* effects influenced Carpenter and Noble — thus meeting Hook’s (2002, p.15) criterion of not only being linked to ‘canonical’ knowledge, but also *altering that canon in some way*.

Finally, given Gerson’s (2002, pp.284-285) observation that discoveries made “outside [a given field] remain unconnected to [that field’s] canonical knowledge”, the fact that Braid belonged “*the right scientific community for [his discovery] to be integrated into on-going work*” (Jones, 2002, p.325, my emphasis) can never be overstated.

10.5 Braid’s Knowledge Creation

Braid’s work with *hypnotism* was significant in two different ways. Not only did his research identify certain ‘new’ phenomena, but he also provided an unambiguous, systematic representation of events and processes which — whilst not of the immutable precision of, say, the *inverse-square law* — were entirely adequate to the needs of therapeutic *orthopraxy* and, through this, introduced an entirely a ‘new’ theoretical orientation that possessed a far greater predictive, descriptive, and explanatory power, which:

[194]

- (a) identified ‘new’ phenomena that required explanation;
- (b) explained the ‘new’ phenomena in an entirely new way;
- (c) provided a better explanation of the ‘old’ phenomena than the earlier theories;
- (d) provided more accurate predictions than the earlier theories;
- (e) altered the disciplinary mind-set by providing an entirely ‘new’ understanding of the ‘old’ problems; and, finally,
- (f) altered the disciplinary mind-set by creating an entirely ‘new’ understanding of the ‘new’ phenomena that demanded entirely ‘new’ explanations.

By speaking in the subject-centred terms of *psycho-physiology*, *monoideism*, and *mono-ideodynamic change*, etc., he not only provided apprehensive potential patients with a means through which their proposed hypnotic experiences could be understood in a non-terrifying way — in particular,

not as a loss of “*will*” — but also a simple, systematic set of descriptive terms with which they could later describe those experiences to themselves and others.

10.6 Braid's Positioning of Hypnotism

Mesmerists claimed their phenomena were due to the ‘extraordinary’ (heretofore hidden) power of the ‘magnetic agency’ emanating from operator-to-subject. Braid not only demonstrated that their “higher phenomena” were due to ‘ordinary’ and specific “sources of fallacy” (Bramwell, 1903, pp.144-149; Yeates, 2013, pp.741- 743), but also provided an ‘ordinary’, subject-centred explanation for *hypnotism* — therefore, only needing ‘ordinary’ evidence (Fig.10) — “based upon some *unexpected manifestations* of well-recognised *physiological laws*” (BFM.1, p.442, emphasis added).

In the process of actively promoting *hypnotism* as a therapeutic intervention, he actively ‘positioned’ (Trout, 1969) *hypnotism* as a means through which the natural mental propensity of humans to concentrate, from time to time, upon a single idea, to the exclusion of others, could be intentionally harnessed in a structured and predictable fashion to generate specific biophysical and psychosocial *monoideodynamic* change. In relation to Braid himself, three coincident facts obtain:

- (a) as a highly-regarded and well-qualified surgeon, his advocacy of a *hypnotism-centred approach* to various types of physical disorder was most emphatically not a ‘smokescreen’ to conceal that he could not perform the standard surgical procedures of his day at the highest level of proficiency;
- (b) his active promotion of a *drug-free therapeutic regime* came from a fully-qualified, officially recognised apothecary, with unrestricted access to all *materia medica*, all drugs, and all proprietary medicines; and
- (c) his constant promotion (and application) of *hypnotic anaesthesia* — whenever appropriate, and whenever possible — came from a fully qualified surgeon who (post-1847) had unrestricted access to ether, chloroform, and nitrous oxide.

[195]

Now, it would be at once accepted as a guiding principle by any administrator of justice, that the more **extraordinary** any assertion—that is, the more widely it departs from ordinary experience—the stronger is the testimony needed to give it a claim on our acceptance as truth; so that while **ordinary** evidence may very properly be admitted as adequate proof of any ordinary occurrence, an **extraordinary** weight of evidence would be rightly required to establish the credibility of any statement that is in itself inherently improbable, the strength of the proof required being proportional to the improbability.

Fig.10. Carpenter's view on extraordinary claims (Carpenter, 1877, p.382).

10.7 Braid's Promotion of Hypnotism

Braid was always a surgeon and general practitioner — never a *proto-psychiatrist* — and he was operating long before the mechanistic, 'mental pus removal' theories and therapeutic approaches of Freud (see Freud, 1895/1955, p.305), etc. came on the scene, the impetus of which would (later) divert many (otherwise) potentially 'health-invoking' Braidian-hypnotherapists into the far narrower domain of the *dedicated* 'disease-banishing' secular exorcists whose *concentrated efforts* are *exclusively directed* at the rectification of 'deviant thinking', the un-imagining of 'imaginary ailments', the reversal of 'hysterical disorders', and the expulsion of 'mental germs' — and that alone, and nothing else (Yeates, 2002, pp.10-11; 2016a, pp.8-9).

Braid not only promoted *hypnotism* as a viable, efficacious, and easily reproduceable psychosomatic therapeutic approach (cost-free and requiring no additional apparatus) to the medical profession in general, but also (even more strongly) to the general public as a pathway through which they could, in many cases — using their own natural mental strengths, with complete safety, and without vulnerability, when intelligently guided, in the appropriate fashion, by responsible operators — have their physical ailments remedied without any need to avail themselves of the dangerous, mutilating, and inefficacious medical interventions of the day.

[Or, as Erickson would later remark, circumstances in which (otherwise) dormant, entirely natural processes "comparable in nature and extent to those which occur in 'psychosomatic illness' [could be activated, resulting] in what might, as a parallelism, be termed 'psychosomatic health'" (1960, p.157).]

10.8 Braid's Promotion of "Suggestion"

From a 21st-century perspective, the baffling fact that Braid never spent any time explaining (i) the manner, form, and content of his "suggestions" ("auricular" or otherwise), (ii) the psychophysiological workings of the "suggestive principle" through which these suggestions, once "*made*" and "*taken*" (using the *made/taken* distinction of Janet, 1920, pp.284-285) generated their corresponding phenomena, or (iii) the means through which the "mono-ideo-dynamic principle of action" performed its functions (*hypothesis non fingo*, again!), requires some explanation.

[196]

Given the routine remarks habitually made in the standard institutional 'creation myths' and 'founders legends' —i.e., that such-and-such *borrowed* and *reworked* the earlier notions of so-and-so—it is essential to understand that Braid neither borrowed nor reworked the brilliant top-down principle centred on the concept of "dominant ideas" that Thomas Brown developed from his detailed understanding of psychosomatic illnesses such as the "*Swiss Disease*" (now known as *nostalgia*), in order to, among other things, explain the evocative nature of poetry (Brown, 1851, §.XXXVIII, pp.241-247; on 'nostalgia' see Anspach, 1934; Rosen, 1975; Nikelly, 2004; and Sedikides, et al., 2004).

As one who had attended Brown's lectures at Edinburgh University, and as one who clearly understood the *abstract, philosophical ramifications* of Brown's systematic representation of "suggestion" —i.e., the manner in which a "dominant 'suggestive' idea" became a "suggesting idea", and how this "suggesting idea", *per medium* of the (otherwise unexplained) "suggestive principle", was converted into its corresponding "suggested idea", which, in turn, generated the suggested (*ideodynamic*) phenomena—Braid applied Brown's abstract, philosophical systematic understanding to *the concrete, practical domain of hypnotherapeutic practice*.

We must recognise that Braid's *instantiation* (or, *realisation*) of Brown's abstract principles was precisely that. It was not a *re-purposing* of Brown's principles. That Brown's (uncontroversial) theories, representations, and observations were already widely known—Brown's "*Lectures*", in their various editions and formats (from the first jumbled, hurriedly published, four-volume edition of 1820, to the complete, fully-corrected version published in 1851), were probably the most widely read philosophical works in the first half of the 19th-century (Brown, 1820a, 1820b, 1827a, 1827b, 1851), and were used as a text at Harvard for almost a decade (Todd, 1943, pp.64-65)—Braid never felt any need to explain "dominant idea" or "suggestion" to his (already well-informed) audience.

10.8.1 “Suggestion” not a Factor in “Hypnotisation”

From extensive research, based on the textual evidence within Braid’s own published (and unpublished) works, one emphatic statement can be made: in direct contrast to the entirely mistaken assertions (and self-serving refashioning of history) routinely broadcast by post-Bernheimian ‘authorities’ such as Milton Erickson—e.g., “In the course of his investigations Braid reached the conclusion that hypnotism was wholly a matter of suggestion” (Erickson, 1934, p.609)—*at the time of his death Braid was still VERY ACTIVELY REJECTING even the slightest thought of ‘suggestion’ being an explanation for the ‘act of hypnotisation’.*

10.9 Braid’s ‘Boundary-Work’

In examining the various challenges faces by Braid, his characteristic propensity for destroying rival claims by producing mutually exclusive evidence (rather than attacking the claims, or the claimants themselves) is significant. In relation to Braid and hypnotism, Gieryn’s (1983, 1999) cartographic ‘boundary-work’ [197] concept, denoting the determination of what lies within and without the specific ‘territory’ of a profession/ discipline is remarkably productive, due to its wide range of ‘mappings’ in relation to:

- (a) the ‘boundary-workers’ themselves: the discoverers, explorers, cartographers, developers, settlers, etc.; and
- (b) the ‘boundary-work’ they perform: opening up the ‘dangerous unknown’ for those that follow, surveying terrain, defining boundaries, proclaiming the exclusive ownership of the territory, extending the boundaries (thus, expanding the territory), welcoming like-thinking ‘migrants’, and, in the spirit of “the price of liberty is eternal vigilance” (Charlton, 1809, p.85), defending the boundaries against the incursion of ‘outsiders’.

Braid was not only an intrepid explorer (the equal of Blaxland, Lawson and Wentworth), a brilliant cartographer (the equal of James Cook and Matthew Flinders), a cross-cultural explainer (the equal of Sir Richard Francis Burton), an exporter of territory-specific knowledge (the equal of exporting South American cinchona to combat European malaria), but was also a pro-active responder to any overt or covert threats to the territory, and an extremely robust defender against unjustified sovereignty claims.

10.10 Braid’s Final Theoretical Position

As with all exploration/research, Braid’s enterprise didn’t set out from whence it finished; and, so, it’s not surprising that his final representations were far more polished, far more precise, far more distinctive, and far more appropriate (and, even, far more ‘user-friendly’) than the interim representations he entertained at the beginning of his quest.

Having demonstrated Lafontaine's claim of 'magnetic agency' had no foundation and, recognising that his '*hypnotisation*' procedures (and their consequences) had valuable clinical applications, he distinguished his own methods (and their phenomena) from those of the mesmerists, and began using '*neuro-hypnotism*' to denote the mental arrangement induced by an antecedent act of '*hypnotisation*'.

In early 1852 Braid adopted the useful top-down "*ideo-motor principle of action*" notion Carpenter had introduced to account for the means through which Braid's *hypnotism, per medium* of "dominant ideas" (à la Thomas Brown), generated phenomena. Soon, however, Braid was convinced by Noble's arguments that the expanded notion of an "*ideo-dynamic principle of action*" was more suitable and appropriate—and in order to emphasise the significance of the dominance of a strongly held single idea, Braid spoke of in terms of the "*mono-ideo-dynamic principle of action*" generating "*mono-ideo-dynamic change*" for the rest of his life.

It is also significant that, towards the end of his life, Braid recognised that in conducting his watershed *experimentum crucis* on 20 November 1841, he had unintentionally unleashed a cascade of insights, advances, and understandings, [198] the outcome of which was the emergence of an entirely new domain of natural philosophy and medical interest, which Braid identified as *psycho-physiology*.

10.11 Braid's Promised Final Work Never Published

Braid's *Neurypnology* was never reprinted; and, unfortunately, Braid never lived long enough to complete and publish his long-promised masterwork that would, no doubt, have delivered:

- (a) a clear and precise description of his understanding of Brown's "dominant idea" concept;
- (b) a systematic description of how he constructed and delivered 'suggestions' to his hypnotised subjects;
- (c) a coherent account of the incremental evolution of his theories and practices;
- (d) a systematic description of his final, polished theoretical position; as well as
- (e) his mature thoughts upon the strategic application of hypnotism in terms of:
 - (i) the circumstances to which it could be applied,
 - (ii) the frequency of treatment—e.g., "I have hypnotized some patients daily for several months successfully" (Braid, 1847b, p.591), and
 - (iii) the goals that should be sought with each intervention.

11. *Braid's (Unrecognised) Genius*

Given his obvious intelligence and sagacity, the question arises, was Braid a *genius*? (or was he just *talented*?). In his reflections “On Genius” (1888, pp.429-455), the German philosopher, Arthur Schopenhauer, identified two significant differences between *genius* and *talent* (at pp. 447-448):

- (a) *Talent* hits a target that all can see, but no one else can hit – which explains why talent is immediately recognised.
- (b) *Genius* not only hits a target that no one else can hit, but also hits a target that no one else can see – which explains why genius is not immediately recognised.

By this measure it is certain that, as well as being extremely talented, Braid was also a *genius*.

However, as Lange-Eichbaum observed, in his *Problem of Genius* (1931, p.33), the individual genius, in order to be recognised as such, must first of all acquire fame; and that, from this fact, “‘unrecognised’ genius does not exist; people are not geniuses until they have been ‘recognised’” (p.34). Moreover, Lange-Eichbaum continues, in the absence of “apostles”, “it is probable that [their] ‘genius’ would never have come into existence [at all]”; and, further, that “for the unhappy prophet the slowness with which his work makes headway is, indeed, a tragical destiny”, simply because “his life is often over before the fruit ripens” (p.45).

[199]

Unfortunately, in Braid’s case, the fact that Braid’s *Neurypnology* was never reprinted, that he never lived long enough to produce his promised masterwork, that he conducted no formal training courses, had no ‘hypnotic apprentices’, no ‘school’, and no ‘disciples’ and, especially, that he has been so comprehensively written out of the history of hypnotism, of surgery, and of anaesthesia, has rendered any later acquisition of any such reputation completely impossible.

12. *Braid's Pre-eminence*

The conventional view of the history of science is that science advances gradually by the hard work of many investigators but that its course involves sudden spurts when someone, who is eventually to become known as a “Great Man”, has a revolutionary insight or makes a crucial discovery which changes the speed or direction of progress in scientific endeavor.

(Boring, 1964, p.681)

12.1 *Pre-Eminence vs. Priority*

Using a photographic analogy suggested by the “zooming” metaphor of Roth (2001, 31-33), while the ‘fine-grained’, and narrower perspective of Braid, which addresses the issue of Braid’s ‘firstness’, or *priority* (e.g., Merton, 1942, 1957; Boring 1964; Strevens, 2003) is highly significant, it is also true that the far more ‘course-grained’, and wider perspective, relating to Braid’s *pre-eminence*, or ‘greater eminent-ness’ *than others*, is, at least, of equal significance.

12.2 Braid 'Quarantined'

By 1855, Braid's induction methods had progressed several stages beyond his initial 'cork on forehead' technique of 1841, with each incremental stage having slightly less 'power', but a far wider application than its predecessor (see Braid, 1855b; Bramwell, 1913, pp.40-41; Braid/Purcell, 1969/1860, *passim*, etc.).

Braid had abandoned his 'cork-on-the-forehead' technique by early 1842, having found that many of his subjects could not maintain the requisite 'fixity of vision', with both eyes, on an object so close to them and, so, "to obviate this, I caused them to look at a more distant point, which, *although scarcely so rapid and intense in its effects*, succeeds more generally than the other, and is therefore what I now adopt and recommend" (*Neurypnology*, pp.27-28, *emphasis added*).

As Braid's understanding, clinical knowledge, and practical experience increased, his explanations developed well beyond his original 'exhaustion of the nervous system' theory. Although he actively used *hypnotism*, and applied Brown's "dominant idea" principles (via "suggestion") to an ever-wider range of conditions, he was a busy surgeon using a new modality to pursue his regular medical goals, never a *mad-doctor*, *alienist*, or *proto-psychiatrist* attempting to cure 'deviant minds'.

Writing from extensive clinical experience in his landmark text book, *A System of Medical Hypnosis* (1960, p.51), Australian psychiatrist and medical hypnotist [200] Ainslie Meares emphasised that Braid's induction technique was:

- (a) *historically significant* ("it served a very valuable purpose in helping to remove the aura of occultism which had grown around the use of [hypnotism]");
- (b) *simple* ("probably one of the easiest methods for the student to learn in his first studies"); and, in earlier times,
- (c) *widespread* ("for a hundred years this became the most generally used method of inducing hypnosis").

However, Meares also noted an unfortunate consequence of the orientation of modern research: "the very ease with which [Braid's] method provides in inducing hypnosis has in more recent years become a stumbling block, as it were, to the investigation of the more psychodynamic aspects of hypnosis" (*ibid.*).

Meare's insight—that modern researchers (and practitioners whose clinical approaches are based on that research) do not use Braid's (comparatively instantaneous) induction technique—helps to explain why Braid's views, strategies, and techniques have been so actively quarantined by advocates of 'modern' approaches, centred on Bernheim's "*hypnosis*", rather than Braid's *hypnotism*, that rely on:

- (a) gradual, extended-in-time, Bernheimian, progressive-relaxation-based, “you are going to sleep” inductions;
- (b) hypnotherapeutic practices that tend more to the secular exorcism style;
- (c) hypnotherapeutic interventions that are conducted with a secular shamanic style; and/or
- (d) ‘appeals-to-a-higher-power’, ‘addiction’-centred hypnotherapeutic approaches that are firmly based on the beliefs of one or more of the modern religious healing cults.

13. The Patent Model

Although Braid was subjected from time to time to considerable abuse, denigration, misrepresentation, and professional jealousy by members of the medical profession, it’s clear that he was far more ‘acceptable’ than John Elliotson (see Fig.11).

Setting aside Braid’s other scientific pursuits, surgical innovations, and his considerable contributions to the eventual widespread adoption of inhalation anaesthesia and, having discussed Braid’s watershed influence in relation to his boundary-work, his capacity for structured thinking, his sagacity, his timeliness, his conversion of ‘problems’ into ‘puzzles’, his contributions to ‘canonical knowledge’, and his alterations of that disciplinary ‘canon’, we must recognise and celebrate his undoubted pre-eminence over his contemporaries.

Claims for Braid’s pre-eminence are strongly supported by the level to which various criteria, routinely used by patent examiners (see, for instance, Bracha, 2005), are (by analogy) satisfied: allowing us to side-step the plethora of (modern)

[201]

For several reasons Braid was not subjected to the persecution and vituperation that were given so abundantly to [John] Elliotson.

First, he rejected the fluidic theory and the miracles.

Second, he proposed a new name for the state produced in his subjects and proceeded to explain it by established or plausible physiological concepts. For a long time neither Braid nor the medical profession was certain that hypnotism and mesmerism were [or were not] the same.

Third, his articles were not rejected, because *The Medical Times* was competing with *The Lancet*, which angrily opposed Elliotson, and the spirit of competition made Braid less unacceptable to the [*Medical Times*] than he might otherwise have been.

Fourth, Braid was ignored by Elliotson and fought by the mesmerists in general, and therefore he stood apart from the main targets of the wrath of the orthodox.

Fifth, he was of milder temperament than Elliotson.

Sixth (and very important), he was self-employed and held no academic or hospital appointments from which he could be separated.

Fig.11. James Braid vs. John Elliotson (Pattie, 1967, p.32).

unfounded claims based upon retrospective appeals to the ‘legitimacy’ of particular contemporary practices, based on one or more specific, purpose-built, historically untrue ‘*creation myths*’ or ‘*founders’ legends*’.

13.1 Priority

Who was it that (i) first *used* the designated term, (ii) *intentionally* engaged in the designated behaviour, (iii) treated the designated entity as *distinct* and *discrete*, (iv) *conceptualised* the designated issue, (v) represented the matter in that particular *way*, and/or (vi) first came to that particular *conclusion*?

Here, the issue is not quite so much one of ‘Who was first to ABC?’, but one of ‘Who first did ABC, knowing that they were doing ABC?’; in other words, from Mosteller’s (1948) perspective, who was the first to ‘do the right thing for the right reason’?

- Braid was the first to use the terms ‘neuro-hypnotism’ and ‘suggestion’.
- Braid was the first to deliberately hypnotise himself by visual fixation.
- Braid was the first to deliberately hypnotise another individual by visual fixation.

- Braid was the first to intentionally deliver systematic ‘auricular suggestions’ to hypnotised subjects in a structured way.
- Braid was the first to produce a terminological taxonomy based upon the central hypnotic state.

[202]

13.2 *Transformativeness*

To what extent did the innovation transform the existing status quo into some other?

- In the process of establishing the authenticity of *hypnotism*, and in determining its distinctive differences from both mesmerism and animal magnetism, Braid proved that hypnotisation did not depend upon an operator.
- In the process of examining the phenomena of *hypnotism*, Braid proved that the magnetist’s concept of ‘rapport’ had no foundation.
- In concrete terms, his visual fixation technique generated the psycho-biophysical arrangement that he (eventually) called “monoideism”.
- In slightly less-concrete terms, he was the first to strategically apply structured suggestion to a hypnotised subject.
- In far more metaphorical terms, he created hypnotherapy.

13.3 *Originality*

If ‘*Creativity*’, implies that the innovation can be attributed to a single, specific *origin*, then to what extent was the innovation uniquely the work of the individual concerned – as distinct from it being a copy of the work of some other person?

- Braid’s innovation was in the provision of proof that ‘magnetic agency’ was not responsible for Lafontaine’s transformation, and that it required no operator.
- Braid’s watershed *experimentum crucis* was conducted on the evening of Saturday, 20 November 1841.
- All of the relevant crucial experiments were conceived and conducted by Braid alone (and although his experiments lay outside the accepted domain of medical science, they were always undertaken with the most fastidious medical scientific precision).

13.4 *Novelty*

Braid’s innovation was not simply restricted to his notion of *hypnotism* (i.e., the mental arrangement of “monoideism”, a.k.a. the “hypnotic state”) alone; but, also, to:

- his discovery of a *natural* (as opposed to *supernatural*) means of producing that state – the ‘upwards and inwards squint’;

- his identification of the *biophysical* (as opposed to *metaphysical*) pathway through which that state was achieved — the nervous system and the brain;
 - his adoption of the top-down *metaphorical* mechanisms specifically created by Carpenter and Noble to describe the means through which Braid's 'hypnotic state', once achieved, generated its phenomena — initially Carpenter's 'ideo-motor principle of action' and, soon after, Noble's 'ideo-dynamic principle of action';
 - his conversion of the theoretical speculations of Thomas Brown into a practical method through which that mechanism could be intentionally directed in a structured way — 'hypnotic suggestion'; and, finally,
- [203]**
- his identification, derived from the theoretical speculations of Thomas Brown, that the optimal suggestive condition was that of the single, concentrated "dominant idea" — *monoideism*.

An innovative act either creates something entirely new or takes something old and uses it in some entirely new way. Therefore, when assessing innovation, we must examine both:

- (a) *serendipity*: the extent to which the innovation, although 'hidden in plain sight', was 'non-obvious' to other (otherwise) adequately equipped individuals — i.e., those 'adequately equipped' in terms of their standard, discipline-peculiar knowledge, skills, experience, talent, competence and proficiency; and
- (b) *watershed*: the extent to which the innovation *did not* emerge from its immediately preceding *status quo* in a way that was inevitable from the natural extension of that *status quo* — i.e., the extent to which the innovation could not be anticipated.

[It is widely held that the issue of 'novelty' is far more objective than the far more subjective issue of 'originality'.]

- In terms of 'non-obvious to others', Braid's innovation was to observe that Lafontaine's success was not due to Lafontaine's operator-to-subject visual fixation upon the subject, but was due to the subject's subject-to-operator visual fixation upon Lafontaine — and, moreover, Braid's clear demonstration that it could be replicated by the subject performing a 'double internal and upward squint' *entirely on their own, with no operator present*, and significantly, it didn't matter what the object of the subject's visual fixation was.
- In terms of 'taking something old and using it in some entirely new way', Braid's innovation of delivering '*auricular suggestions*' meant that he had created a practical

means through which all of the discoveries that Thomas Brown had made on the consequences of dominant ideas could be intentionally harnessed to generate psychobiophysical change.

13.5 *Uniqueness*

To what extent was the innovation separate from, apart from, and distant from, its surrounding context?

- Braid's innovation meets these criteria.

13.6 *Positioning*

To what extent did the innovator clearly 'position' (Trout, 1969) the term, behaviour, entity, conception, conclusion, etc.?

- Braid 'positioned' the term hypnotism.
- Braid positioned Brown's "dominant idea" principle in an entirely new domain.

[204]

- Braid 'positioned' hypnotism as distinct from both mesmerism and animal magnetism — activities that involved what Pyysiäinen (2002, p.729) identified as "counter-intuitive events [attributed to] counterintuitive agents" — and in so doing established hypnotism as an entirely rational (rather than metaphysical) practice.
- Braid 'positioned' hypnotism as a new therapeutic modality.

13.7 *Usefulness/Utility*

To what extent was the innovation of practical use in the business of the profession?

- Quite apart from it eventually becoming a profession in itself, hypnotism transformed aspects of the delivery of both surgery and conventional medicine as understood in Braid's time.
- Hypnotism became an important part of both psychiatry and clinical psychology (disciplines that were yet to be invented) — as well as becoming an important laboratory tool for experimental psychologists and cognitive scientists.
- Hypnotism (and hypnotic suggestion) played an important part in the conceptualisation of psychosomatic medicine and psychoneuroimmunology.
- Outside its clinical operator-to-subject applications, Braid also introduced the additional concept of self-hypnosis.

13.8 *Regard/Esteem*

To what extent have later generations treated the introduction of the term, behaviour, entity, conception, conclusion, etc. to be a watershed moment, separating the past from the future?

[Regard/esteem also speaks to the matters of novelty and originality.]

In terms of its extraordinary and extended (downstream) multi-disciplinary impact on the domains of natural philosophy, medical knowledge, psychophysiological understanding, applied therapeutics, etc., Braid's watershed *experimentum crucis* in its related domains was, at least, equal to the multi-disciplinary impact of Oersted's 21 April 1820 discovery that an electric current deflected a compass needle (i.e., Oersted, 1876/1820) had upon physics, electricity, magnetism, etc.

- Braid's (private) *experimentum crucis* 20 November 1841: *THE* watershed moment.
- Braid's first public lecture on 27 November 1841: A watershed moment.
- Braid's (28 February 1842) advertisement for his March London lectures: A watershed moment – the first time the word “*neurohypnology*” appeared in print.
- Braid's first 1842 Manchester lecture on 12 March 1842: A watershed moment – Braid introduced “*hypnotism*” and “*hypnotized*”.
- Braid used hypnotism for pain-free surgery in early 1842 (*Neurypnology*, pp.250-253): A watershed moment.

[205]

- Braid's experiments in March 1843: A watershed moment – Braid proved that there was no need for a subject to be *en rapport* with the hypnotist.
- Braid used autosuggestion to dispel pain in 1844 (Braid, 1850, pp.63-64): A watershed moment.

13.9 *Acceptance*

Regardless of the level of heated controversy at the time, to what extent did the innovation eventually come to be universally considered as part of the accepted body of knowledge? – such as was the case, at their introduction, with Wegener's *continental drift*, in 1912 (see Demhardt, 2006), and Festinger's *cognitive dissonance*, in 1957 (see Metin & Camgoz, 2011).

- Braid's techniques provided a means through which the various hypnotic states could be “reliably elicited, controlled, and studied” – and, most significantly, “applied to therapeutic aims” (Boardman, 2005, 50).
- Hypnotism and the hypnotic state are recognised worldwide as veridical; and hypnotherapy is recognised worldwide as a legitimate therapeutic modality.

14. Conclusion

Still, I knew that I was missing some important key, and I felt frustrated.

I then remembered the primary rule of intellectual life: when puzzled, it never hurts to read the primary documents—a rather simple and self-evident principle that has, nonetheless, completely disappeared from large sectors of the American experience.

(Stephen Jay Gould [1997], p.18)

In concluding this set of articles—which are, to a large extent, very firmly based on the clear evidence of the original contemporary sources—I must stress that the scope of my (earlier) Ph.D. research project which culminated in the presentation of my dissertation, *James Braid: Surgeon, Gentleman Scientist, and Hypnotist*, in April 2013, was restricted by two specific conditions of my candidature; namely, that it had to:

- (a) make a significant contribution to scholarship, and
- (b) deal with a limited topic that was sufficiently ‘narrow’ to allow the demonstration of a capacity to conduct research at an appropriate ‘depth’ (consequently, it went no further than a brief mention of the publication of *Neurypnology*).

This inter-related set of six articles, which also extensively examines all of Braid’s later research, therapeutic innovations, theories, and contributions to both hypnotic and chemical anaesthesia, took more than four years to complete.

The entire project not only demanded a thorough re-reading of all of the material connected with my 2013 dissertation—and, of course, a re-examination and re-[206] appraisal of the conclusions I had drawn, along with an expanded understanding of the material itself—but also an additional, and protracted immersion in the equally demanding task of locating, reading, understanding, and appraising an entirely new set of resources (the two research tasks, altogether, involved the scrutiny of nearly 3,000 items).

Given my firm belief that much of the present-day disciplinary confusion arises from the discipline’s (‘low-need-for-cognition’) failure to question the statements made by individuals inappropriately regarded as ‘authorities’, it seems to me that any assertion on my part of an ‘out-ranking’, higher degree of ‘authority’—and, from that, making (otherwise unsubstantiated) *ex cathedra* statements that so-and-so is the case based upon a self-assumed ‘authority’—would involve a very unfortunate continuation of the same error.

In order to avoid this inexplicable situation—I use ‘inexplicable’ advisedly, because hypnotherapists, as a group, consistently assert the *importance* of the mind’s contents and, moreover, the *extreme importance* of the accuracy and the unequivocal precision of that content and, yet, in these matters, they are collectively guilty of taking the (inaccurate) word of others

without any scrutiny — I have done my best to present an ordered, coherent, and historically relevant set of materials, and cross-reference each of the ‘Braid’ details that I have provided to the appropriate items.

In the process, I have also identified a number of additional and equally important resources (including URLs, wherever I can) that will, in addition to the ‘primary documents’, serve as a valuable guide for the further, ongoing, self-directed study of the diligent reader (i.e., those not inclined to skim articles, with the marginal comment “TL:DR”, ‘too long; didn’t read’).

Firmly based on the material in contemporaneous, long neglected accounts, hitherto unknown contemporaneous resources, and contemporaneous resources previously thought lost, these articles have examined Braid’s formative influences, his personal, and intellectual background, and his training as a philosopher, gentleman scientist, and surgeon. In particular, long-ignored descriptions of Braid’s surgical rationale and his actual surgical practices have been examined; many of which readily explain his approach to the therapeutic application of hypnotism, and his identification of the sorts of condition that might usefully indicate hypnotic intervention.

Finally, from all of my extensive research, it seems a completely inescapable conclusion that, in the absence of James Braid, ‘leading edge’ scientist, brilliant structured thinker, author of a wide range of important publications in a number of scientific domains, and, beyond that, and in particular, in the absence of his surgical training, apprenticeship, and his time at Edinburgh University, *the discipline of hypnotism (as a complex of incremental strategic interventions) may never have come into being, at all, ever.*

[207]

15. A Final Word

The extremely daunting enterprise of researching and producing this inter-related set of six articles has taken more than four years to complete, during which time I have been forced to confront many challenging personal circumstances. Without the kindness, support, endless patience, constant encouragement, insightful questions, and experienced advice of Julie Ditrich, the editor of this journal, the task would never have been finished. Thank you, Julie.

[208]

References

- Alcock, J. (2001). Science vs. Pseudoscience, Nonscience, and Nonsense. *The Skeptical Inquirer*, 25(3), 50-54.
- Anspach, C.K. (1934). Texts and Documents: Medical Dissertation on Nostalgia by Johannes Hofer, 1688. *Bulletin of the Institute of the History of Medicine*, 2, 376-391.
- Azam, E. (1860). Note sur le sommeil nerveux ou hypnotisme ['A note on nervous sleep, or hypnotism']. *Archives Générales de Médecine*, 5(15): 5-24. URL = <https://tinyurl.com/y4c426gp>
- Azam, [E.] (Tucker, J.I. trans) (1876). Periodical Amnesia; or, Double Consciousness [translated from the *Revue Scientifique*, 2(5), (29 May 1876), pp.481-487]. *Journal of Nervous and Mental Disease*, 3(4), 584-612. URL = <https://tinyurl.com/y5m8gdfm>
- Azam, E. (1887). *Hypnotisme, Double Conscience et Altérations de la Personnalité* ['Hypnotism, Double Consciousness and Alterations of Personality']. Paris, J.B. Baillière et Fils. URL = <https://tinyurl.com/y2q7vpbv>
- Azam, E. (1892). Double Consciousness. In D.H. Tuke (ed.), *A Dictionary of Psychological Medicine, etc., Volume I*, (pp.401-406). London: J. & A. Churchill. URL = <https://tinyurl.com/y4huv4ql>
- BAAS.1. (1856). Notices and Abstracts of Miscellaneous Communications to the Sections: Botany and Zoology including Physiology: Physiology: The Physiology of Fascination, by James Braid, L.R.C.S. Edin., M.W.S. &c, Manchester. In *British Association for the Advancement of Science, Report of the Twenty-Fifth Meeting of the British Association for the Advancement of Science: Held at Glasgow in September 1855*, (pp.120-121). London; John Murray. URL = <https://tinyurl.com/y3aqbf3y>
- Bazin, P. (1859). (Letter). *Comptes Rendus Hebdomadaires des Séances de l'Académie de Sciences*, 49, 946. URL = <https://tinyurl.com/y6sdpzbg>
- BDM.1. (1860). Anæsthesia. *Ballou's Dollar Monthly Magazine*, 11(5), 493. URL = <https://tinyurl.com/yyhgxnln>
- Bennett, J.H (1858). The Influence of Predominant Ideas on the Healthy and Disordered Functions of the Body. In J.H. Bennett, *Clinical Lectures on the Principles and Practice of Medicine (Second Edition)*, (pp.289-300). Edinburgh: Adam & Charles Black. URL = <https://tinyurl.com/y5xy2tez>
- BFM.1. (1860, 1 April). Hypnotism—Its Application to Production of Anæsthesia. *The British and Foreign Medico-Chirurgical Review*, 25(50), 441-451. URL = <https://tinyurl.com/y4ur8fkt>
- Binney, E.W. (1859). Report of the Twenty-First Annual Meeting, Held 27th October, 1859: Curator's Report. *Transactions of the Manchester Geological Society*, 2(1), 1-6.

- Boardman, A.D. (2005). *James Braid, Hypnotism and the Psyche in early Victorian Manchester: An Exploration of Romantic Philosophy, Popular Thought and Psychological Medicine*, (M. Phil. Dissertation), The University of Manchester, 2005.
- Boring, E.G. (1964). Cognitive Dissonance: Its Use in Science. *Science*, 145(3633), 680-685.
- Bracha, O. (2005). United States Patents. In O. Bracha, *Owning Ideas: A History of Anglo-American Intellectual Property*, (Chapter IV; pp.401-518). (Unpublished S.J.D. Dissertation), Harvard Law School.
URL = <https://tinyurl.com/y2hz28n3>
- Braid, J. (1816). Case of Reunion of a Separated Portion of the Finger. *The Edinburgh Medical and Surgical Journal*, 12(48), 428-429. URL = <http://tinyurl.com/yb9xkhac>
- [209]**
- Braid, J. (1817a). Account of the Fatal Accident which happened in the Leadhills Company's Mines, the 1st March, 1817. *The Edinburgh Medical and Surgical Journal*, 13(51), 353-356.
URL = <http://tinyurl.com/y7yr8u7v>
- Braid, J. (1817b). Account of a Thunder Storm in the Neighbourhood of Leadhills, Lanarkshire. *The Edinburgh Monthly Magazine*, 1(5), 471-472. URL = <http://tinyurl.com/yicyqnb6w>
- Braid, J. (1823a). Observations on the Formation of the Various Lead-Spars. *Memoirs of the Wernerian Natural History Society*, 4(2), 508-513. URL = <http://tinyurl.com/y9rbncgd>
- Braid, J. (1823b). Case of Hydrothorax, successfully treated by Blood-letting, with Observations on the Nature and Causes of the Disease. *The Edinburgh Medical and Surgical Journal*, 19(77), 546-551.
URL = <http://tinyurl.com/y7yr8u7v>
- Braid, J. (1825). Case of a peculiar Ulcerous Affection, successfully treated, with Observations. *The Edinburgh Medical and Surgical Journal*, 23(82), 42-49. URL = <http://tinyurl.com/y7rolw5r>
- Braid, J. (1841). Observations on Talipes, Strabismus, Stammering, and Spinal Contortion, and the Best Methods of Removing Them. *Edinburgh Medical and Surgical Journal*, 56(149), 338-364.
URL = <https://tinyurl.com/yevd7kwx>
- Braid, J. (1842). *Satanic Agency and Mesmerism Reviewed, in a Letter to The Reverend H. Mc. Neile, A.M., of Liverpool, in Reply to a Sermon Preached by Him in St. Jude's Church, Liverpool, on Sunday, April 10th, 1842, by James Braid, Surgeon, Manchester*. Manchester: Simms & Dinham, and Galt & Anderson. [For the complete text, corrected and annotated for the modern reader, see Yeates, 2013, pp.671-700; plus pp.599-620.] URL = <http://tinyurl.com/ph3r9hu>
- Braid, J. (1843). *Neurypnology; or, The Rationale of Nervous Sleep, Considered in Relation with Animal Magnetism, Illustrated by Numerous Cases of its Successful Application in the Relief and Cure of Disease*. London: John Churchill. [NB: important 'Errata et Addenda' on p.266] URL = <https://tinyurl.com/yxv66zuu>

Braid, J. (1845). *On the Distinctive Conditions of Natural and Nervous Sleep* (unpublished manuscript, dated 17 December 1845).

Braid, J. (1846). *The Power of the Mind over the Body: An Experimental Inquiry into the Nature and Cause of the Phenomena Attributed by Baron Reichenbach and Others to a "New Imponderable"*. London: John Churchill.
URL = <http://tinyurl.com/zb3owe5> [A note, in Braid's handwriting, is at p.3.]

Braid, J. (1847a). Facts and Observations as to the Relative Value of Mesmeric and Hypnotic Coma, and Ethereal Narcotism, for the Mitigation or Entire Prevention of Pain during Surgical Operations (Written on 30 January 1847, plus postscript written on 13 February 1847). *The Medical Times*, 15(385), 381-382; 16(387), 10-11.
URL = (Vol.15) <https://tinyurl.com/zor57o2>
URL = (Vol.16) <https://tinyurl.com/yyudd3qf>

Braid, J. (1847b). Facts and Observations as to the Relative Value of Mesmeric and Hypnotic Coma, and Ethereal Narcotism, for the Mitigation or Entire Prevention of Pain during Surgical Operations (Written on 30 January 1847, plus postscript written on 13 February 1847). *The Edinburgh Medical and Surgical Journal*, 67(171), 588-594. URL = <https://tinyurl.com/yxqc3my5>

Braid, J. (1847c). Observations on the Use of Ether for Preventing Pain during Surgical Operations, and the Moral Abuse which it is Capable of Being Converted to (Written on 26 March 1847). *The Medical Times*, 16(393), 130-132. URL = <https://tinyurl.com/yyudd3qf>

Braid, J. (1850). *Observations on Trance; or, Human Hybernation*. London: John Churchill.
URL = <https://tinyurl.com/y6s7hpzw>

[210]

Braid, J. (1851a). *Electro-Biological Phenomena Considered Physiologically and Psychologically*, by James Braid, M.R.C.S.E., M.W.S., &c. &c; *From the Monthly Journal of Medical Science for June 1851, with Appendix*. Sutherland & Knox, (Edinburgh), 1851. URL = <https://tinyurl.com/zje3xps>

Braid, J. (1851b). Case of Cæsarian Section—Death of Patient. *London Medical Gazette*, 13, 238-241.
URL = <https://tinyurl.com/yd4azzqe>

Braid, J. (1852). *Magic, Witchcraft, Animal Magnetism, Hypnotism, and Electro-Biology; Being a Digest of the Latest Views of the Author on these Subjects by James Braid, M.R.C.S., Edin., C.M.W.S. &c.; Third Edition, Greatly Enlarged, Embracing Observations on J. C. Colquhoun's 'History of Magic', &c.* London: John Churchill. URL = <http://tinyurl.com/ydf2grd9>

Braid, J. (1853a). *Hypnotic Therapeutics, Illustrated by Cases: With an Appendix on Table-Moving and Spirit-Rapping, Reprinted from the Monthly Journal of Medical Science for July 1853*. Edinburgh: Murray & Gibbs.
URL = <https://tinyurl.com/y6stzln8> [This copy has an amendment in Braid's own hand on p.37.]

Braid, J. (1853b, 19 November). Letter to the Editor. *The Manchester Examiner and Times*, 6.

- Braid, J. (1855a). On the Nature and Treatment of Certain Forms of Paralysis. *Association Medical Journal*, 3(141), 848-855. URL = <https://tinyurl.com/ybqoqtwj>
- Braid, J. (1855b). *The Physiology of Fascination, and the Critics Criticised*. Manchester: Grant & Co.
URL = <http://tinyurl.com/y878xjrq>
- Braid, J. (1855c). *The Critics Criticized* (unpublished manuscript, dated 23 October 1855).
- Braid, J. (1856, 31 May), Chemical Analysis—The Rudgeley Poisoning. *The Manchester Guardian*, 5.
- Braid, J. (1858a). The Bite of the Tsetse: Arsenic Suggested as a Remedy (Letter to the Editor, written on 6 February 1858). *British Medical Journal*, 1(59), 135. URL = <https://tinyurl.com/y2ply6pl>
- Braid, J. (1858b). *Arsenic as a Remedy for the Bite of the Tsetse, Etc. (Letter to the Editor, written in March 1858)*. *British Medical Journal*, 1(63), 214-215. URL = <https://tinyurl.com/y2hkpj3f>
- Braid, J. (1859, 26 November). The Manchester Geological and Natural History Societies (Letter to the Editor, written in 'November 1859'). *The Manchester Courier*, 11.
- Braid, J. (1860a). *On Hypnotism* (unpublished manuscript, dated 7 January 1860).
- Braid, J. (1860b). Mr Braid on Hypnotism (Letter to the Editor, written on 28 January 1860). *The Medical Circular*, 16(397), 91-92.
- Braid, J. (1860c). Mr Braid on Hypnotism (Letter to the Editor, written on 21 February 1860). *The Medical Circular*, 16(401), 158-159.
- Braid, J. (1860d). Hypnotism (Letter to the Editor, written on 26 February 1860). *The Critic*, 20(505), 312.
- Braid, J. (Purcell, S.A.J. trans.) (1969/1845). On the Distinctive Conditions of Natural and Nervous Sleep [unpublished manuscript, dated 17 December 1845]. In C.A.S. Wink, *The Life and Work of James Braid (1795-1860), With Special Reference to Hypnotism as an Orthodox Medical Procedure*, (pp.xvi-xliii). (Unpublished B. Litt. Dissertation), Oxford University.
- Braid, J. (Purcell, S.A.J. trans.) (1969/1855). *The Critics Criticized* [unpublished manuscript, dated 23 October 1855]. In C.A.S. Wink, *The Life and Work of James Braid (1795-1860), With Special Reference to Hypnotism as an Orthodox Medical Procedure*, (pp.vi-xv). (Unpublished B. Litt. Dissertation), Oxford University.
- [211]**
- Braid, J. (Purcell, S.A.J. trans.) (1969/1860). On Hypnotism [unpublished manuscript, dated 7 January 1860]. In C.A.S. Wink, *The Life and Work of James Braid (1795-1860), With Special Reference to Hypnotism as an Orthodox Medical Procedure*, (pp.xliv-lxviii). (Unpublished B. Litt. Dissertation), Oxford University.
- Bramwell, J.M. (1903). *Hypnotism: Its History, Practice and Theory*. London: Grant Richards. URL = <http://tinyurl.com/hftdxv2>

- Bramwell, J.M. (1913). *Hypnotism: Its History, Practice and Theory (Third Edition)*. London: William Rider & Son. URL = <http://tinyurl.com/y92lcwro>
- Broca, P. (1859a). Physiologie: Note sur un nouvelle méthode anesthésique [‘Physiology: Note on a new anaesthetic method’]. *Compte Rendus Hebdomadaires des Séances de l’Académie des Sciences*, 49(23), 902-905. URL = <https://tinyurl.com/yyr2pa22>
- Broca, P. (1859b, 7 December). Sur l’anaesthésie chirurgicale provoquée par l’hypnotisme [‘On surgical anaesthesia caused by hypnotism’]. *Bulletin de la Société de Chirurgie de Paris*, 10, (7 December 1859), 247-270. URL = <https://tinyurl.com/yxmu5t69>
- Broca, P. (1859c). Note sur une nouvelle méthode anesthésique, par M. Paul Broca, agrégé à la Faculté de Médecine, chirurgien des hôpitaux de Paris [‘Note on a new anaesthetic method, by Paul Broca, of the Faculty of Medicine, surgeon, Paris Hospital’]. *Cosmos: Revue Encyclopédique Hebdomadaire des Progrès des Sciences et de Leurs Applications aux Arts et à l’Industrie*, 15(24), 645-651. URL = <https://tinyurl.com/y5dwxgmd>
- Broca, P. (1859d). (Rectification). *Cosmos: Revue Encyclopédique Hebdomadaire des Progrès des Sciences et de Leurs Applications aux Arts et à l’Industrie*, 15(25), 675-677. URL = <https://tinyurl.com/y4np2u4d>
- Brown, T. (1820a). *Sketch of a System of the Philosophy of the Human Mind: Part First: The Physiology of the Mind*. Edinburgh: Bell & Bradfute, Manners & Miller, and Watch & Innes. URL = <https://tinyurl.com/yahwel8t>
- Brown, T. (1820b). *Lectures on the Philosophy of the Human Mind by the Late Thomas Brown, M.D., in Four Volumes*. Edinburgh: W. & C. Tait.
 URL = (Vol.I) <https://tinyurl.com/ycnnj2pr>
 URL = (Vol.II) <https://tinyurl.com/ycuggf28>
 URL = (Vol.III) <https://tinyurl.com/y9dlyogf>
 URL = (Vol.IV) <https://tinyurl.com/y7kg6uz2>
- Brown, T. (1827a). *A Treatise on the Philosophy of the Human Mind, Being the Lectures of the Late Thomas Brown, M.D., Professor of Moral Philosophy in the University of Edinburgh, Abridged, and Distributed according to the Natural Divisions of the Subject by Levi Hedge, Professor of Logic and Metaphysics in Harvard University, in Two Volumes: Volume I*. Cambridge, MA: Hillard & Brown. URL = <https://tinyurl.com/y5ckrofe>
- Brown, T. (1827b). *A Treatise on the Philosophy of the Human Mind, Being the Lectures of the Late Thomas Brown, M.D., Professor of Moral Philosophy in the University of Edinburgh, Abridged, and Distributed according to the Natural Divisions of the Subject by Levi Hedge, Professor of Logic and Metaphysics in Harvard University, in Two Volumes: Volume II*. Cambridge, MA: Hillard & Brown. URL = <https://tinyurl.com/yyz849tg>
- Brown, T. (1851). *Lectures on the Philosophy of the Human Mind (Nineteenth Edition)*. Edinburgh: Adam & Charles Black. URL = <http://tinyurl.com/j24lwra>

- Carpenter, W.B. (1852). Sleep. In R.B. Todd (ed.), *The Cyclopædia of Anatomy and Physiology: Vol.IV: Part I: (PLA – STA)*, (pp.677-697). London: Longman, Brown, Green, Longmans, & Roberts.
URL = <https://tinyurl.com/yywgb9n9>
- [212]**
- Carpenter, W.B. (1877). Mesmerism, Odyism, Table-Turning and Spiritualism, Considered Historically and Scientifically. *Fraser's Magazine: Lecture I*, 15(86), 135-157; *Lecture II*, 15(87), 382-405.
URL = <https://tinyurl.com/y5all7wp>
- Charlton, T.U.P. (1809). *The Life of Major General James Jackson (Part I)*. Augusta, GA: Geo. F. Randolph & Co. URL <https://tinyurl.com/y2tvedry>
- Cole, S. (1970). Professional Standing and the Reception of Scientific Discoveries. *American Journal of Sociology*, 76(2), 286-306.
- Coxe, J.R. (1808). (*Irradiato, Actinobolismus*). *The Philadelphia Medical Dictionary*. Philadelphia, PA: Thomas Dobson. URL = <https://tinyurl.com/y5uxxvkx>
- Dechambre, A., & Verneuil, A.A.S. (1859). De l'anaesthésie hypnotique ['On hypnotic anaesthesia']. *Gazette Hebdomadaire de Médecine et de Chirurgie*, 6(49), 769-771. URL = <https://tinyurl.com/y23hxn3l>
- Demhardt, I.J. (2006). Alfred Wegener's Hypothesis on Continental Drift and Its Discussion in Petermanns Geographische Mitteilungen (1912-1942). *Polarforschung*, 75(1), 29-35.
URL = <http://tinyurl.com/y4thb6bj>
- Doyle, A.C. (1927a). Houdini the Enigma (I). *The Strand Magazine*, 74(8), 134-143.
- Doyle, A.C. (1927b). Houdini the Enigma (II). *The Strand Magazine*, 74(9), 265-270.
- EMSJ.1. (1860, March). Physiology: The Induction of Cataleptic Sleep or Hypnotism in the Lower Animals. *The Edinburgh Medical and Surgical Journal*, 5(9), 866-868. URL = <https://tinyurl.com/y4egbs84>
- Engelbart, D.C. (1963). A Conceptual Framework for the Augmentation of Man's Intellect. In P.W. Howerton & D.C. Weeks (eds.), *Vistas in Information Handling, Volume 1: The Augmentation of Man's Intellect by Machine*, (pp.1-29). Washington, DC: Spartan Books. URL = <https://tinyurl.com/yysumlkf>
- Engels, F. (Wischnewetzky, F.K., trans.) (1887). *The Condition of the Working Class in England in 1844*. New York, NY: John W. Lovell Company. URL = <http://tinyurl.com/ybsajlsq>
- Erickson, M.H. (1934). A Brief Survey of Hypnotism. *The Medical Record: A Weekly Journal of Medicine and Surgery*, 140(11), 609-613.
- Erickson, M.H. (1960). Breast Development Possibly Influenced by Hypnosis: Two Instances and the Psychotherapeutic Results. *American Journal of Clinical Hypnosis*, 2(3), 157-159.
- Fletcher, G. (1929). James Braid of Manchester. *The British Medical Journal*, 2(3590), 776-777. URL = <https://tinyurl.com/yagsox2n>

- Freud, S. (1955). Psychotherapy of Hysteria [1895]. In J. Strachey (ed. and trans.), *The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume II (1893-1895): Studies on Hysteria by Josef Breuer and Sigmund Freud*, (pp.255-305). London: Hogarth Press.
- Gauld, A. (1992). *A History of Hypnotism*. Cambridge: Cambridge University Press.
- Gauld, A. (2004). Braid, James (1795-1860). In H.C.G Matthews & B.H. Harrison (eds.), *Oxford Dictionary of National Biography: In Association with the British Academy: from the Earliest Times to the Year 2000*, (pp.280-281). Oxford: Oxford University Press.
- Gerson, E.M. (2002). Premature Discovery is Failure of Intersection among Social Worlds. In E.B. Hook (ed.), *Prematurity in Scientific Discovery: On Resistance and Neglect*, (pp.280-291). Berkeley, CA: University of California Press.
- Gieryn, T.F. (1983). Boundary-Work and the Demarcation of Science from Non-Science: Strains and Interests in Professional Ideologies of Scientists. *American Sociological Review*, 48(6), 781-795.
URL= <https://tinyurl.com/y75bnbom>
- [213]**
- Gieryn, T.F. (1999). John Tyndall's Double Boundary-Work: Science, Religion, and Mechanics in Victorian England. In T.F. Gieryn, *Cultural Boundaries of Science: Credibility on the Line* (pp.37-64). Chicago, IL: University of Chicago Press. URL = <http://tinyurl.com/y8duaz2e>
- Gould, S.J. (1997). This View of Life: Nonoverlapping Magisteria. *Natural History*, 106(2), 16, 18-22, 60-62.
URL = <https://tinyurl.com/y634q78f>
- Guérineau, J. (1860). Amputation de cuisse pratiquée sans douleur sous l'influence des manoeuvres hypnotiques ['Thigh amputation performed without pain under the influence of hypnotic manoeuvres']. *Gazette Médicale de Paris*, 15(2), 21. URL = <https://tinyurl.com/yy3kku8j>
- Gow, M. (2016). Discovering Dr. James Braid. *The International Society of Hypnosis Newsletter*, 40(1), 24-32.
URL = <https://tinyurl.com/y4l2o9cd>
- Hesse, M.B. (1961). *Forces and Fields: The Concept of Action at a Distance in the History of Physics*. New York, NY: Philosophical Library.
- Hollaway, J. (2018). H.P. Lovecraft and the Horror of History. *Fortean Times*, (369), 32-39.
- Honigberger, J.M. (1852). *Thirty-Five Years in the East, etc*. London: H. Baillière.
URL = <https://tinyurl.com/y5h9sxqg>
- Hook, E.B. (2002). A Background to Prematurity and Resistance to "Discovery". In E.B. Hook (ed.), *Prematurity in Scientific Discovery: On Resistance and Neglect* (pp.3-21). Berkeley, CA: University of California Press.

- Hunt, R. (1844). *Researches on Light: An Examination of All the Phenomena Connected with the Chemical and Molecular Changes Produced by the Influence of the Solar Rays; Embracing all the Known Photographic Processes and New Discoveries in the Art*. London: Longman, Brown, Green & Longmans.
URL = <https://tinyurl.com/y4c8bjcj>
- Hunt, J. (1845, 3 March). Contributions to Actino-Chemistry. *Memoirs and Proceedings of the Chemical Society*, 2, 311-320. URL = <https://tinyurl.com/y663ando>
- Hunt, J. (1867). What is Actinism?. In J. Timbs (ed.), *Things Not Generally Known Familiarly Explained, a Book for Old and Young*, (p.33). London: Lockwood & Co. URL = <https://tinyurl.com/y3auocas>
- Inglis, A. (1809). Regulations to be Observed by Candidates, Previous to Their Being Taken Upon Trials for Obtaining Diplomas from the Royal College of Surgeons, Edinburgh. *Edinburgh Medical and Surgical Journal*, 5(19), 387-388. URL = <https://tinyurl.com/ybxb2dhh>
- "J." (1823). Letter to the Editor (Short Account of the Miners at Leadhills and Wanlockhead). *The Christian Observer*, 23(1), 26-29. URL = <https://tinyurl.com/yjxyebjl>
- Janet, P. (1920). Lecture XIII: The Hysterical Stigmata—Suggestibility. In P. Janet, *The Major Symptoms of Hysteria: Fifteen Lectures Given in the Medical School of Harvard University, Second Edition with New Matter*, (pp.270-292). New York, NY: Macmillan Company. URL = <https://tinyurl.com/y5qbnh7s>
- Jones, M. (2002). The Concept of Prematurity and the Philosophy of Science. In E.B. Hook (ed.), *Prematurity in Scientific Discovery: On Resistance and Neglect*, (pp.306-326). Berkeley, CA: University of California Press.
- Kidd, C. (1860a). Dr Kidd on Hypnotism (Letter to the Editor, written on 30 December 1859). *The Medical Circular*, 16(396), 60.
- [214]**
- Kidd, C. (1860b). Mr Braid and Dr Kidd on Hypnotism (Letter to the Editor, written on 11 February 1860). *The Medical Circular*, 16(398), 112-113.
- Kirsch, I. (1985). Response Expectancy as a Determinant of Experience and Behavior. *American Psychologist*, 40(11), 1189-1202. URL = <https://tinyurl.com/yba7tcc2>.
- Kirsch, I. (1997). Response Expectancy Theory and Application: A Decennial Review. *Applied and Preventive Psychology*, 6(2), 69-79.
- Kircher, A. (1671). II.I.X: Experimentum Mirabile: De Imaginatum Gallinæ ['A miraculous experiment on the imagination of a chicken']. In A. Kircher, *Ars Magna Lucis et Umbrae in decem Libros digesta, etc.*, (pp.112-113). Amsterdam: Joannem Janssonium à Waesberge & Haerdes Elizaevi Weyerstraet.
URL = <https://tinyurl.com/y8npjqsw>

- Kovach, F.J. (1979). The Enduring Question of Action at a Distance in Saint Albert the Great. *The Southwestern Journal of Philosophy*, 10(3), 161-235.
- Lange-Eichbaum, W. (1931). *The Problem of Genius*. London: Kegan Paul, Trench, Trübner & Company.
- LAS.1. (1860). Correspondance: M. Velpeau. *Compte Rendus de l'Académie des Sciences*, 50(9), 439.
URL = <https://tinyurl.com/yy5m7k2c>
- LI.1. (1860). Physiologie: Hypnotisme (extensive extracts of letter from M. Guerry). *L'Institut*, 28(1360), 28-29. URL= <https://tinyurl.com/y4dv7s3f>
- LIM.1. (1842, 8 April). Mr. Braid's Second Lecture on Neurohypnology. *The Liverpool Mercury and Lancashire General Advertiser*, 112.
- Livingstone, D. (1857). *Missionary Travels and Researches in South Africa, etc.* London: John Murray.
URL = <https://tinyurl.com/yycqhqkf>
- Livingstone, D. (1858). Arsenic as a Remedy for the Tsetse Bite (Letter to the Editor, written at sea on 22 March 1858). *British Medical Journal*, 1(70), 360-361. URL = <https://tinyurl.com/y6odoskz>
- Mach, E. (1926/1976). On Thought Experiments. In E. Mach, *Knowledge and Error: Sketches on the Psychology of Enquiry*, (pp.134-147). Dordrecht: D. Reidel Publishing Co., 1976. [Translation of *Erkenntnis und Irrtum* (5th Edition), 1926.]
- Matthews, M.R. (1988). Ernst Mach and Thought Experiments in Science Education. *Research in Science Education*, 18(1), 251-257.
- Mayo, H. (1851). Letter XIV: Hypnotism. In H. Mayo, *On the Truths Contained in Popular Superstitions, With an Account of Mesmerism* (Third Edition), (pp.236-239). Edinburgh: William Blackwood & Sons.
URL= <https://tinyurl.com/y8wm5zbv>
- Meares, A. (1960). *A System of Medical Hypnosis*. New York, NY: Julian Press.
- Merton, R.K. (1942). A Note on Science and Democracy. *Journal of Legal and Political Sociology*, 1(1-2): 115-126.
- Merton, R.K. (1957). Priorities in Scientific Discovery: A Chapter in the Sociology of Science. *American Sociological Review*, 22(6), 635-659. URL = <https://tinyurl.com/ybaeae66>
- Metin, I., & Camgoz, S.M. (2011). The Advances in the History of Cognitive Dissonance Theory. *International Journal of Humanities and Social Science*, 1(6), 131-136. URL = <http://tinyurl.com/y49bao7x>
- Michéa, C. (1859). Du sommeil cataleptique chez les gallinacés ['Cataleptic Sleep in the Fowl']. *Gazette des Hôpitaux Civils et Militaires*, 32(149), 593-594. URL = <https://tinyurl.com/yxzjlutx>

[215]

- Mosteller, F. (1948). A k -Sample Slippage Test for an Extreme Population. *The Annals of Mathematical Statistics*, 19(1), 58-65. URL = <https://tinyurl.com/y33qyf6j>
- Nikelly, A.G. (2004). The Anatomy of Nostalgia: From Pathology to Normality. *International Journal of Applied Psychoanalytic Studies*, 1(2), 182-199.
- Oersted, H.C. (trans. J.E. Kempe) (1876/1820). Experiments of the Effect of Electric Action on the Magnetic Needle. *Journal of the Society of Telegraph Engineers*, 5(15-16), 464-469. [Oersted's Latin original reprinted at pp.459-464.] URL = <https://tinyurl.com/y4zzzedx>
- Pattie, F.A. (1967). A Brief History of Hypnotism. In J.E. Gordon, *Handbook of Clinical and Experimental Hypnosis*, (pp.10-43). New York, NY: The Macmillan Company.
- Peterkin, W. (1799). Additions to Volume IV, No.LXVI, page 505, Parish of Leadhills: Additional Communications Respecting Leadhills, by the Rev. William Peterkin, Minister of Ecclesmachan, deceased. In J. Sinclair, *The Statistical Account of Scotland, Drawn up from the Communications of the Ministers of the different Parishes, by Sir John Sinclair, Bart. Volume XXI*, (pp.97-99). Edinburgh: William Creech. URL = <http://tinyurl.com/y972fqjh>
- Peterson, M.J. (1978). *The Medical Profession in Mid-Victorian London*. Berkeley, CA: University of California Press.
- Popper, K.R. (1963). *Conjectures and Refutations: The Growth of Scientific Knowledge*. London: Routledge & Kegan Paul.
- Preyer, W. (1878). *Die Kataplexie und der thierische Hypnotismus* ['Cataplexy and Animal Hypnosis']. Jena: Gustav Fischer. URL = <https://tinyurl.com/y4erh3kx>
- Preyer, W. (1881). James Braid: *Über den Hypnotismus* [James Braid: *On Hypnotism*]. In W. Preyer, *Die Entdeckung des Hypnotismus. Dargestellt von W. Preyer ... Nebst einer ungedruckten Original- Abhandlung von Braid in Deutscher Uebersetzung* ['The Discovery of Hypnotism, presented by W. Preyer, together with a hithertofore unpublished paper by Braid in its German translation'], (pp.59-96). Berlin: Verlag von Gebrüder Paetel. URL = <https://tinyurl.com/y5vh2owm>
- Preyer, W. (ed.) (1882). *Der Hypnotismus. Ausgewählte Schriften von J. Braid. Deutsch herausgegeben von W. Preyer* ['On Hypnotism; Selected Writings of J. Braid, Edited in German by W. Preyer']. Berlin: Verlag von Gebrüder Paetel. URL = <https://tinyurl.com/y35q24nq>
- Preyer, W. (1890). *Der Hypnotismus: Vorlesungen gehalten an der K. Friedrich-Wilhelm's-Universität zu Berlin, von W. Preyer. Nebst Anmerkungen und einer nachgelassenen Abhandlung von Braid aus dem Jahre 1845* ['Hypnotism: Lectures delivered at the Emperor Frederick William's University at Berlin by W. Preyer. With Notes and a Posthumous Paper of Braid from the Year 1845']. Wien: Urban & Schwarzenberg. URL = <https://tinyurl.com/y6s5ss7j>

Pyysiäinen, I. (2002). Mind and Miracles. *Zygon*, 37, 729-740.

RCSE.1. Royal College of Surgeons (1815, 16 November). Advertisement: Public Notices: Surgeons' Hall, Edinburgh. *Caledonian Mercury*, 1.

REIS. ['A Retired East India Surgeon' (pseud.)] (1844). Practice of Hindoo Mesmerism (Letter to the Editor). *The Medical Times*, 10(250), 292-293. URL = <https://tinyurl.com/yxmcq643>

Risse, G.B. (2005). "Mill Reek" in Scotland: Construction and Management of Lead Poisoning. In G.B. Risse, *New Medical Challenges During the Scottish Enlightenment*, (pp.199-228). Amsterdam: Rodopi.

Rosen, G. (1975). Nostalgia: A 'Forgotten' Psychological Disorder. *Psychological Medicine*, 5(4), 340- 354.

[216]

Rosner, L. (1991). *Medical Education in the Age of Improvement: Edinburgh Students and Apprentices 1760-1826*. Edinburgh: Edinburgh University Press.

Roth, W.M. (2001). Situating Cognition. *The Journal of the Learning Sciences*, 10(1-2), 27-61.

Rowland, I.D. (2004). Athanasius Kircher, Giordano Bruno, and the Panspermia. In P. Finden (ed.), *Athanasius Kircher: The Last Man Who Knew Everything*, (pp.191-205). New York, NY: Routledge.

Schiller, F. (1992). *Paul Broca: Founder of French Anthropology, Explorer of the Brain*. New York, NY: Oxford University Press.

Schopenhauer, A. (1888). *Die-Welt als Wille und Vorstellung: Zweiter Band* ['The World as Will and Representation, Volume 2']. Leipzig: F.A. Brockhaus. URL = <https://tinyurl.com/y7aytkc8>

Schwenter, D. (1651). XVI.XIII: Eine ganz wilde Hennen so zam zu machen/ daß sie von sich selbst unbeweglich still und in grossen Forchten sitze ['To make a very wild hen so tame that, by herself, she will sit still [as if frozen] in great fear']. In D. Schwenter, *Deliciae Physico-Mathematicæ: oder Mathemat[ische] und Philosophische Erquickstunden, etc. [Volume One]*, (p.562). Nürnberg: Jeremiae Dumlars. URL = <https://tinyurl.com/y9de5kco>

Secord, A. (2004). Binney, Edward William (1812-1881). In H.C.G. Matthew & B.H. Harrison (eds.), *Oxford Dictionary of National Biography*. Oxford: Oxford University Press.

Sedikides, C., Wildschut, T., & Baden, D. (2004). Nostalgia: Conceptual Issues and Existential Functions. In J. Greenberg, S.L. Koole & T. Pyszczynski (eds.), *Handbook of Experimental Existential Psychology*, (pp.200-214). New York, NY: Guilford Press.

Shea, D., & Troyer, A. (1843). *The Dabistán; or, School of Manners, Translated from the Original Persian, with Notes and Illustrations, in Three Volumes*. London: Oriental Translation Fund of Great Britain and Ireland.

URL = (Vol.I) <https://tinyurl.com/yxk7do54>

URL = (Vol.II) <https://tinyurl.com/y3clbcwe>

URL = (Vol.III) <https://tinyurl.com/y3lwfwzg>

Smith, R.A. (1883). *A Centenary of Science in Manchester (In a Series of Notes)*. London: Taylor & Francis.

URL = <https://tinyurl.com/ydjafome>

Stent, G.S. (1972). Prematurity and Uniqueness in Scientific Discovery. In G. Raspé, and A.G. Schering (eds.), *Advances in the Biosciences, 8: Workshop on Mechanisms and Prospects of Genetic Exchange, Berlin, December 11 to 13, 1971*, (pp.433-449). Oxford: Pergamon Press.

Stevenson, R.L. (1886), *Strange Case of Dr. Jekyll and Mr. Hyde*. London: Longmans, Green & Co.

URL = <https://tinyurl.com/y638t7e2>

Stiles, A. (2006). Robert Louis Stevenson's Jekyll and Hyde and the Double Brain. *Studies in English Literature, 1500-1900*, 46(4), 879-900. URL = <https://tinyurl.com/yyd5z2hd>

Strevens, M. (2003). The Role of the Priority Rule in Science. *The Journal of Philosophy*, 100(2), 55-79.

URL = <https://tinyurl.com/pgvpe5t>

TC.1. (1860, 25 February). Hypnotism, or Nervous Sleep. *The Critic*, 20 (503), 245.

Tigri, A. (1860). (Letter: Sur la nature des phénomènes observés dans l'hypnotisme et le sommeil magnétique ['On the nature of phenomena observed in hypnotism and magnetic sleep']. *Comptes Rendus Hebdomadaires des Séances de l'Académie de Sciences*, 50, 55. URL = <https://tinyurl.com/y3g7d4zo>

TL1. (1859). A Revolution in Anæsthetics. *The Lancet*, 74(1894), 620-621.

URL = <https://tinyurl.com/yyyjldvf>

[217]

TL.2. (1859). Hypnotism in Paris. *The Lancet*, 74(1895), 650-651. URL = <https://tinyurl.com/yy5649rh>

TL.3. (1860). Sudden Death of Mr. James Braid, Surgeon, of Manchester. *The Lancet*, 75(1909), 335.

URL = <https://tinyurl.com/y37z8cmv>

TMG.1. (1847, 8 September). Jenny Lind and the Hypnotic Somnambulist. *The Manchester Guardian*, 5.

TMG.2. (1860, 26 March). Sudden Death of Mr. James Braid. *The Manchester Guardian*, 2.

Todd, E.W. (1943). Philosophical Ideas at Harvard College, 1817-1837. *The New England Quarterly*, 16(1), 63-90. URL = <https://tinyurl.com/y3588syx>

Townshend, C.H. (1854). *Mesmerism Proved True, and the Quarterly Reviewer Reviewed*. London: Thomas Bosworth. URL = <https://tinyurl.com/y4y3ewkb>

- Trout, J. (1969). "Positioning" is a Game People Play in Today's Me-Too Market Place. *Industrial Marketing*, 54(6), 51-5.
- Tuke, D.H. (1880). British Medical Association Annual Meeting, Cambridge, 1880: Section of Psychology: Discussion on Sleep and Hypnotism. *The Journal of Mental Science*, 26(79), 471-474.
- Walpole, H. (1840/1906). Letter to Sir Horace Mann, written on 28 January, 1754. In P. Cunningham (ed.), *The Letters of Horace Walpole, Fourth Earl of Orford, Volume II*, (pp.364-367). Edinburgh: John Grant.
URL = <http://tinyurl.com/y6vv9kl9>
- Ward, W. (1822). *A View of the History, Literature and Mythology of the Hindoos: Including a Minute Description of Their Manners and Customs, and Translations from Their Principal Works*, in Three Volumes (Second Edition). London: Kingsbury, Parbury & Allen.
URL = (Vol.I) <https://tinyurl.com/y3a36tvn>
URL = (Vol.II) <https://tinyurl.com/yy44x75k>
URL = (Vol.III) <https://tinyurl.com/yxvpk5m2>
- Weisberg, M., & Muldoon, R. (2009). Epistemic Landscapes and the Division of Cognitive Labor. *Philosophy of Science*, 76(2), 225-252. URL = <https://tinyurl.com/y46g9ywh>
- Weitzenhoffer, A.M. (2000). *The Practice of Hypnotism (Second Edition)*. New York, NY: John Wiley & Sons.
- Wink, C.A.S. (1969). *The Life and Work of James Braid (1795-1860), With Special Reference to Hypnotism as an Orthodox Medical Procedure*, (B. Litt. Dissertation). Oxford University.
[A deposit copy of Wink's dissertation is held in the Radcliffe Science Library.]
- Yeates, L.B. (2002). The 'MORE TEST': A Mechanism for Increasing the Efficiency of Suggestion. *Australian Journal of Clinical Hypnotherapy & Hypnosis*, 23(1), 1-17. URL = <https://tinyurl.com/w8hrqmz>
- Yeates, L.B. (2004). *Thought Experimentation: A Cognitive Approach*, (Unpublished Graduate Diploma in Arts by Research Dissertation). Sydney, NSW: University of New South Wales.
URL = <https://tinyurl.com/w8hrqmz>
- Yeates, L.B. (2013). *James Braid: Surgeon, Gentleman Scientist, and Hypnotist*, (Doctoral dissertation). University of New South Wales, Sydney, NSW. URL = <http://tinyurl.com/ph3r9hu>
- Yeates, L.B. (2016a). Émile Coué and his Method (I): The Chemist of Thought and Human Action. *Australian Journal of Clinical Hypnotherapy & Hypnosis*, 38(1), 3-27. URL = <https://tinyurl.com/tgng5k9>
- [218]**
- Yeates, L.B. (2016b). Émile Coué and his Method (II): Hypnotism, Suggestion, Ego-Strengthening, and Autosuggestion. *Australian Journal of Clinical Hypnotherapy & Hypnosis*, 38(1), 28-54.
URL = <https://tinyurl.com/qlmec9e>

- Yeates, L.B. (2016c). Émile Coué and his Method (III): Every Day in Every Way. *Australian Journal of Clinical Hypnotherapy & Hypnosis*, 38(1), 55-79. URL = <https://tinyurl.com/ucfwtyv>
- Yeates, L.B. (2018a). James Braid (I): Natural Philosopher, Structured Thinker, Gentleman Scientist, and Innovative Surgeon. *Australian Journal of Clinical Hypnotherapy & Hypnosis*, 40(1), 3-39.
URL = <https://tinyurl.com/qkubezv>
- Yeates, L.B. (2018b). James Braid (II): Mesmerism, Braid's Crucial Experiment, and Braid's Discovery of Neuro-Hypnotism. *Australian Journal of Clinical Hypnotherapy & Hypnosis*, 40(1), 40-92.
URL = <https://tinyurl.com/uejklrj>
- Yeates, L.B. (2018c). James Braid (III): Braid's Boundary-Work, M'Neile's Personal Attack, and Braid's Defence. *Australian Journal of Clinical Hypnotherapy & Hypnosis*, 40(2), 3-57.
- Yeates, L.B. (2018d). James Braid (IV): Braid's Further Boundary-Work, and the Publication of Neurypnology. *Australian Journal of Clinical Hypnotherapy & Hypnosis*, 40(2), 58-111.
- Yeates, L.B. (2018e). James Braid (V): Chemical and Hypnotic Anaesthesia, Psycho-Physiology, and Braid's Final Theories. *Australian Journal of Clinical Hypnotherapy & Hypnosis*, 40(2), 112-167.

[219]

About the Contributor

Lindsay B. Yeates



Dr Lindsay B. Yeates, PhD (History & Philosophy of Science), University of New South Wales (UNSW); MA (Cognitive Science), UNSW; Graduate Diploma in Arts By Research (History & Philosophy of Science), UNSW; BA (Asian Studies), Australian National University (ANU); Diploma of Clinical Hypnotherapy; Diploma of Traditional Chinese Medicine; Certificate of Competence as a Therapy Radiographer,

Royal Melbourne Institute of Technology (RMIT). A Fellow and Life Member of the Australian Society of Clinical Hypnotherapy (ASCH), and the Australian Hypnotherapists' Association (AHA), currently Editorial Assistant at the *Australasian Journal of Philosophy*, and an Adjunct Assistant Lecturer in the School of Humanities and Languages at the University of New South Wales, Lindsay has been variously involved with hypnotism, hypnotherapy, and the training of clinical hypnotherapists for more than fifty-five years.

Following the award of MA for his interdisciplinary cognitive science studies in 2002, and a Graduate Diploma in Arts for his research into the mechanism of thought experiments in 2004, Lindsay was awarded a scholarship to undertake extensive post-graduate research into the events surrounding James Braid's discovery of hypnotism in Manchester in 1841. His acclaimed, groundbreaking doctoral dissertation, *James Braid: Surgeon, Gentleman Scientist, and Hypnotist*, was accepted by the examiners without correction. He was awarded a PhD in 2013.

Driven by a life-long interest in scientific hypnotism and suggestion—in particular, the nature, form, and content of efficacious hypnotic suggestion—Lindsay's professional career reflects his view that a major obligation of any scholar is not only to actively engage in the prolonged studies demanded for both knowledge creation, and the distillation and the refinement of the knowledge so created, but also, to diffuse and disseminate that knowledge. Lindsay's on-going studies, the refinement of his personal understandings, and the non-commercial sharing of his research, form a significant part of that long-term endeavour.

Lindsay B. Yeates

School of Humanities & Languages, University of NSW
Sydney, NSW Australia

Email: lindsay.yeates@unswalumni.com

ORCID ID: <https://orcid.org/0000-0002-0824-9017>